



The Inner Cosmos

A SCION SCIENTIFIC NOVEL

BY Vargo Statten

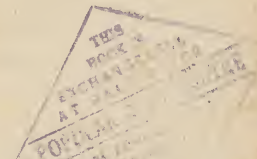
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PRICE

INNER COSMOS

BY

VARGO STATTEN



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CHAPTER ONE

Nalofix, as its inhabitants had named it, was probably the perfect planet—one minute speck in the vast intergalaxial sea in the neighbourhood of Great Andromeda. It existed as one of a retinue of nine worlds revolving around a gigantic central sun. It had youth, beauty, eternal gentle warmth, and carried upon its fair surface a race of some fifty thousand beings.

From our standard the "beings" would have been considered revolting. They stood eight feet in height and were covered in scales; but despite this hideous physical vestment the brains of the Nalofixians were superbly developed. They were lords of their world and, indeed, of their entire System. Long since they had subjected the lesser intelligences of the neighbouring planets and were content now to pursue their scientific achievements until the end of Time. Nor was this impossible of realisation for Nalofix was a world which prevented age ever appearing on a living body. To be an inhabitant of Nalofix was also to be eternal.

Kasmus, ruler of the planet by virtue of being the cleverest scientist, had spent his ageless life trying to discover just why Nalofix set time at zero—and, so far, had not been very successful.

"Not that it really signifies," he commented one day, whilst in the midst of his everlasting experiments. "Perhaps it is foolish to question where a gift comes from—it is better to accept it for what it is."

"That is the way of the unlearned, Master. Science always questions. It cannot progress otherwise."

Kasmus was silent for a moment. He and Selda, his chief adviser, were in the main experimental laboratory of the planet, a mighty building set on a high eminence apart from the city. From here there was a commanding view of the peaceful skies and equally peaceful landscapes.

"Just the same," Kasmus said presently, his voice quiet, "there must be a reason, and I shall never rest until I have found it."

Selda shrugged and returned to work on the charts upon which he was engaged. Kasmus did not join him, instead he strolled out onto the balcony of the laboratory and stood in silence in the evening calm. Reptilian though he was in outline there was a certain majesty in his bearing. His immense intelligence somehow set at naught his incredible physique.

Selda glanced at him once with his huge faceted eyes, then his claw-like hands continued to press the buttons on the apparatus which was making mathematical calculations. Selda was not very conscious of what he was doing. Everything was so automatic on Nalofix. One machine did the work of a hundred men. None had any real need to think—unless they wanted to probe, as Kasmus did, into the infinite mysteries.

Kasmus surveyed the darkening sky and then came back into the great, brightly-lit chamber, his shimmering garments making the faintest swishing sound as he moved. "No other planet save this one has the gift of eternal life, Selda," he mused. "Our neighbour worlds, which we have subjected, die. Already some of them are showing signs of senility. But not Nalofix. It, and we, never age."

"Age is purely the breakdown of matter, Master," Selda commented, shrugging. "For some reason the atomic aggregates of this planet do not break down, nor do the cells of the beings upon it."

"I am not sure if eternal life is a good thing." Kasmus wandered across to the telescopic reflector, his claw delicately moving the controlling switches. "It is a freak of Nature, and it has always been my experience that Nature has no place for freaks. She suddenly restores the balance when it is least expected."

"Meaning?" Selda looked up sharply.

"I don't quite know, my friend. That is why I am trying to discover what makes this planet—and us—unique. If I could only do so I'd feel better prepared to face disaster should it ever come upon us."

"Disaster?" Selda smiled unbelievably. "How utterly impossible."

"Nothing is impossible — you should be scientist enough to realise that." The Master hesitated for a moment, apparently trying to settle something in his mind—then he came forward again, summoning a robot as he did so. Immediately the mechanical servant obeyed, whisked as gently as a leaf on the air by the vibrations of its inventor's mind.

"Fetch me File 58/J/B," Kasmus ordered, and the robot swung through an arc and drifted across the wilderness to where the scientific records were kept.

"What are you planning, Master?" Selda asked drily. "Some kind of a surprise for me?"

"At least I think I may shake you out of your habitual acceptance of everything around us."

Selda frowned, and waited, the ruler by his side. In a moment or two the robot came drifting back, the file in its pincer-hand. Kasmus took it and opened it on the charting desk. Selda found himself looking upon photographic plates which appeared to be concentric rings of light, dim at the outermost edge and intensely sharp at the centre.

"Do you know what this is?" Kasmus asked, and there was something close to cynical amusement in his faceted eyes.

"How should I, Master? Your science is infinitely above mine."

Kasmus did not say it, but he inwardly wished Selda were not such a sycophant. There was something very close to subservience in the way he always admitted he was of inferior intelligence.

"This," Kalmus said, "represents the only possible reason for Nalofix being ageless. It is the only photographic plate in existence which actually shows Time-circles. In other words, I have succeeded in photographing the abstract!"

"How?"

"That, my friend, I preserve unto myself. Space and time are interwoven—on that we are agreed. We can photograph space and the objects contained therein, but up to now photography of Time has been considered impossible because the eye cannot see time any more than it can see the wind. But a mathematical lens can, and has. Here you see Time itself trapped on a photographic plate. You will note there are nine circles. Each represents the time-circle in which the nine planets of this system are moving."

"You photographed this from outer space, I assume?"

"Quite so—looking down on Nalofix from a distance of twenty million miles. We, of Nalofix, are nearest the luminary and occupy the smallest and brightest Time-circle. Now look at it closely. Do you not detect something peculiar about it compared to the others?"

It was a considerable time before Selda finally realised what the Master meant, then he looked up in surprise. "Why yes, I believe I do! The other eight circles are not *true* circles. Each one has a break in it—almost infinitesimal, but it is there. But the one in which Nalofix is travelling has no break whatever. It is a perfect circle."

"Exactly. You will also notice in the case of the other circles that at one end of the break they are bright, and at the other end dull and indeterminate. That

represents Time from birth to death—a slow progress to extinction and, when the break is reached, Time has run its course and there can only be dissolution. The other planets have followed their Time-circles and aged in consequence as they near the final break; but not in our case. We pursue our circle eternally and never come to a gap. Therefore Time remains changeless for us and our world."

"Which explains why we are eternal! I understood you had not solved the riddle, Master."

"I do not claim that I have even now. I have photographed the Time-circles, certainly, which can be considered an achievement, but I have not determined of what these Time-circles are composed. They may be an actual material substance or, as is more likely, they may be merely mathematical configurations, visible only to a lens which is in itself a creation of mathematics. Only when I know the composition of these Time-circles will I know what Time itself really is."

There was silence for a moment, then Kasmus' talons closed the file resolutely.

"For the moment, my friend, enough of that. It is a task to which I alone am dedicated, and I will solve it if it takes all eternity."

"You spoke of a disaster which might come upon us," Selda remarked. "Am I permitted to ask what you meant?"

"Certainly. I mean that in probing into this ultimate mystery of Time I may probe too far and unlock something inherent in Time which may destroy us—for if Time ceased to exist we automatically ceased to be. Just as, infinitely long ago, Dakos nearly brought about the destruction of our planet when he probed too far into the atom and found atomic-force. Every secret of Nature is guarded by unimaginable power, and it is on the lap of the gods whether or not that power is released normally or becomes a destroyer."

Selda hesitated upon another question, then thought

better of it as there came a faint humming sound from the immensity of the distant city.

"It is the rest-period, Master," he remarked. "Have I your permission to withdraw?"

"Of course. We will continue to-morrow."

Selda bowed his way out into the mighty corridor and, a few minutes later, was leaving the building. His journey to the city in the calm valley below could have been covered in a few seconds in an atom-car, but as a rule he walked. He always felt he could think better when strolling along in the calmness—and this evening was no exception.

He was half-way along the broad, shining metal roadway when he was met by a figure coming in the opposite direction. There were brief salutations, then the two men of Nalofix started to walk side by side—the one, Selda, advisor to the ruler; and the other a member of the Higher Physicists Group.

"Has the Master proceeded any further?" the physicist asked presently.

"He has photographed Time, Mazro, which is surely one of the greatest of scientific achievements."

"He has?" Mazro's reptilian face was not capable of showing emotion, but it was noticeable in his voice. "Then at last we may have something. Something tangible on which we can work! Evening after evening I have met you on your way back to the city in the hope there might be a way to——"

"Yes, yes, I know. A way to overthrow Kasmus. But I hardly see that his photographing the Time circle helps us much."

"Describe everything to me," the physicist ordered, and listened intently as, during the onward walk to the city, Selda gave the details.

"Not that I can see it avails us anything," he insisted. "As long as we are eternal we are powerless, my friend. Our dream of ruling this planet in Kasmus' place can never obtain. We can only achieve rulership by elimin-

ating *him*, and when age and death are absent what can we do?"

Mazro was silent, musing as he walked slowly along. For many aeons now, as long as he could remember, he and Selda had hoped for some scientific turn of events which would give them the one thing they wanted—mastery over Nalofix and all the worlds around which had been subjected in the planet's name. To the ambitious Mazro and power-loving Selda—his subservience to the ruler only a pretence and quickly dropped when he was away from Kasmus—there was nothing more enticing than the thought of ruling the planet and directing its colossal scientific resources to the gradual domination of whole Andromeda Nebula. Worlds in the tens of thousands, countless numbers of them inhabited, were waiting to be conquered—and all Kasmus did was dabble in his laboratory and ignore these mightier possibilities. To Selda and Mazro it was infuriating in the extreme.

"If Time can be photographed it is not an abstract thing," Mazro said presently, and the observation brought Selda to a halt.

"How can you be sure of that?"

"My dear Selda, I am a physicist—to the exclusion of all else. You for your part are a general scientist and adviser and not specialised in one direction as I am. I know all the details concerning space and dimensions, and I know also that only a material thing can be photographed because only a material thing has vibration by which to be photographed!"

"I don't follow your reasoning — but maybe that doesn't matter. Our concern is to find a way to eliminate Kasmus, and a photograph of Time-circles doesn't seem to me the right way at all."

"But perhaps it can be. Kasmus has now substantiated for me a theory in which I have always believed—namely, that Time is not an abstract thing but a process of vibration. A stream of vibration, if you prefer, which affects everything within it, be it a living creature or a

planet. A vibration which, when it commences, is at the peak of its strength and thereafter starts to fade until it expires. The striking note of a gong is proof enough of that particular thesis. Now, assume Time to be a great vibration which begins at birth and fades out at death, and what do we find?"

"Frankly—" Selda stared absently towards the night sky with its powdering of stars. "Frankly, I don't know."

"We find that it is of a very material order, but our physical senses are not geared to perceive it, as they are to perceive light, heat and other manifestations. All Kalmus has done is devise a photographic lens capable of photographing Time as an ordinary lens photographs a star—which is in a different field of vibration entirely. Now, sufficient power could blast a star to pieces. A similar power, working in a different way, could also blast a Time-circle."

"I suppose it could, though I am not versed enough in physics to understand how. Nor do I see what would be achieved by doing such a thing."

"The achievement would be that it would cause Time to act normally on this world of ours. Death would be possible at last—particularly for Kasmus."

"If possible for him, then also for us." Selda shook his head. "No, the risk is too great. In trying to destroy him we might also destroy ourselves."

"You are too timid, my friend: that has always been your failing."

"I am more inclined to consider it a virtue if it prevents me destroying our planet and everybody upon it!"

"You have so little faith in my scientific knowledge?" There was grim reproach in Mazro's voice as he resumed the walk in the direction of the city. "Believe me, I would take very good care to preserve ourselves, otherwise the experiment would not be worth making. You have told me much of what Kasmus has done—but not enough to satisfy me. I must invent an excuse to work

side by side with him and gather every detail. He will not suspect I am trying to encompass his downfall."

"If, as you assume, Time is a vibratory circle, why is it that it never fades gradually into extinction in our particular circle?"

"It must be because some flaw in cosmic mechanics keeps it constantly replenished from the Time vibration. The whole Universe is filled with a Time-vibration, of course, but each tributary vibration should be sufficient unto itself. In this case the 'river,' if I may call it such, can never run dry because it is connected somehow to the main Time-vibration. Break that connection and Time would become normal. The vibration would slowly fade through the cycles and extinction would come in the normal course of events. It would also mean that nobody would be deathless any more. Therefore Kasmus would be capable of being eliminated."

"You suggest working beside him," Selda commented. "Why do that? The Master is not a fool: he may guess your intentions, and if once his trust in either of us is shaken we can never hope to realise our ambition. The better way would be to explore the laboratory this very night whilst Kasmus is away for the rest-period."

Mazro halted again, pondering. "Yes—maybe that is a good notion, my friend. Are you sure, though, that he takes advantage of the rest-period? I had the impression he works constantly and pays little heed to the need for rest."

"Seldom have I known him miss the rest-period. Even he must replenish his energy."

Mazro did not hesitate any further. He took a glance about him, satisfying himself that darkness was rapidly falling, then with a jerk of his head he motioned Selda to follow him. Silently and swiftly they began to retrace their steps along the mighty road they had already traversed. When they came within close sight of the high eminence on which the master-laboratory stood they surveyed it.

"You were right," Mazro murmured. "Not a light anywhere. The Master has returned to the city for the rest-period. I assume you know how to enter the building?"

"Yes. I know the combination of thought-waves necessary to unlock the main door, but the interior locks to the filing cabinets and machines are the Master's own secret."

"We'll deal with those problems when we come to them."

Mazro strode forward actively to the base of the steps leading up to the main doors, then he looked back in surprise as he beheld Selda hesitating in the starlight.

"Come, man!" Mazro snapped. "What's the matter with you?"

"I am wondering if we are not taking too great a risk." Selda advanced uncertainly. "Should the Master unexpectedly return and find us we——"

"Such rubbish! Leave everything to me. If we *are* caught I will very soon explain away the circumstances."

Selda had no choice. Despite his inward misgivings he ascended the steps and against the door he directed the combination of thought-waves which unlocked it. There was a faint click as the central bar slid back, then the massive portal opened smoothly and lay flat against the wall of the hallway.

"Lead the way," Mazro ordered brusquely. "You know this laboratory much better than I do."

Again Selda obeyed, this time with rising annoyance that he was being treated as a servant. It was the first time he had ever seen the physicist so domineering.

"Make sure the windows are shuttered," Mazro ordered, when the warm darkness of the main laboratory had been reached. "A single gleam of light will give us away and bring Kasmus's hordes upon us from the city."

Long familiarity with the laboratory made Selda's job easy. He actuated the buttons which sealed the great windows and skylights, then he snapped on the cold

glare of brilliance which penetrated to every corner. Mazro quietly closed the main door and clamped over the normal lock. Then he smiled to himself as he looked about him.

"Excellent!" he murmured. "I no longer wonder that the Master spends so much time here—— And you, Selda, are a fool!" Selda's faceted eyes glinted, but he made no comment. "Because you do not learn more of the scientific magic within these walls," Mazro continued, moving forward. "If I were in your place what secrets I would wrest!"

"Perhaps. With the eye of Kasmus upon you it might not prove so easy as you imagine."

"You are far too timid, my friend," Mazro observed drily. "And timidity can have no place when we seek to wrest power from the ruler of the planet. However, where is the file containing the photographic plates of the Time-circles?"

"Over there." Selda nodded to the locked cabinet. "One of the robots might be able to help us, though I doubt it."

He turned and directed his thought-waves to the robot standing beside the wall, but it took no notice. There was no flicker of reaction.

"No help there," Selda said bitterly. "Kasmus himself constructed all the robots in this laboratory, and they are attuned solely to his thought-vibrations."

"Mmmm—a pity." Mazro looked about him then crossed actively to the filing cabinet and inspected it. Presently he shook his head. "Nothing we can do here without smashing it open, and that would instantly give us away."

"There is another way," Selda said, thinking. "I know the mathematical formula of the filing cabinet's lock. It requires another set of mathematics to unlock it——"

"You mean it is an equational lock, opened by the vibrations of pure mathematics?"

"Created by Kasmus's mind, yes. But if we use the calculator over there it will give us the exact configurations necessary to open the cabinet."

"Excellent! There are times, my friend, when I can see why you have the position of adviser. Otherwise I might be inclined to doubt."

Selda scowled but did not say anything. Moving to the calculator he set it in operation with his claw-hand and then fed into it, by means of vibrations, the numbers of the lock itself. A turn of a switch set the computing mechanisms to work to determine how to cancel out the figures given—which would automatically open the lock.

In silence the two scientists waited, Mazro glancing about him meanwhile upon the extraordinary machinery. The extent of the risk he was taking no longer concerned him. In a laboratory like this he was in Paradise.

"If we can open the cabinet and get the file, what then?" Selda asked. "We dare not take it away. What do you propose doing with it?"

"Photographing it and then studying it in my own time. I shall be able to work out something." Mazro turned away, musing to himself, then he looked irritably over his shoulder. "How long does this contrivance take? It surely ought to be giving an answer by now?"

"Yes—it ought," Selda admitted, peering at it. "It should not require more than ten seconds to give such a simple answer. I don't quite——" He stopped dead, his queer eyes widening as he studied the controls.

"Anything the matter?" Mazro asked curtly, returning to his side.

"I'm—I'm not quite sure. These controls seem to have been pre-set to some other arrangement of figures. Possibly some work or other on which the Master was engaged."

"What!"

Alarmed, for he knew the amazing postulations of which the machine was capable, Mazro examined the "feeder-quations." He frowned, peered at the whirling

mysteries inside the machinery, then looked back at Selda.

"You fool!" he whispered. "You insane *fool*! Why didn't you look first?"

"Why should I? The machine wasn't working, so I assumed——"

"You assumed! The machine was working, on low current, working out some complicated problem which the Master had left for it! What we have done is add more figures to the original problem— Great cosmos! We don't even know what the original problem was, or how these new figures may affect it."

Selda hesitated, then reached out his talon to stop the machine, but Mazro prevented him.

"No, my friend, that wouldn't be sensible. If the Master finds the machine stopped he will know somebody has been dabbling. If it is still running, no matter what astounding answer it finally works out, he will be none the wiser. For the moment I think we had better retire. You've bungled this first effort completely."

"But what of the file——?"

"We can't do anything about that at the moment. This machine obviously can't help us, and we certainly dare not smash the cabinet to get the file. Come—whilst we are still safe."

They both cast a final look back at the calculator and then turned to the door. Selda switched off the lights and allowed the window shutters to re-open; then a few minutes later he and Mazro were out in the night again.

"To-morrow," the physicist said, "you will work beside the Master equipped with a micro-camera. You can easily conceal it. Invent some excuse for having that file of Time-circles produced and then seize your chance to photograph it."

"And if I am caught in the act?"

"You mustn't be! The Master has implicit trust in you, so make use of it. This is the one chance we've been looking for to perhaps overcome this world's timelessness—— I know the risk, but it must be taken."

CHAPTER TWO

For the first time since its birth in the region of the Nebula Andromeda there was something different about Nalofix. It was not anything visible to the eye, though it could be appreciated by the senses—a curious tautening of the nerves, a consciousness of physical weariness which, so far, the inhabitants of Nalofix had never known.

None were aware, as they slept through the rest period—Selda and Mazro included—that something had happened to the Time-circle in which the planet moved. It was interlaced with mathematical vibrations, each of which had its own individual effect upon the aggregate. At the moment it was a problem in pure mathematics, and the answer lay in the machine functioning in the Master's laboratory.

When dawn came to the planet the following morning there were inexplicable changes which instantly attracted attention. For one thing the city was no longer a gleaming citadel of brilliant metal: it was dull, mysteriously matt-surfaced, and pitted with myriads of tiny holes.

Incoming fliers from the other side of the planet reported that the vast areas of crop fields and deserts were split by crumbling ravines which appeared to be growing larger, whilst vegetation had a curious blight upon it and was turning slowly brown.

These evidences in themselves were singular enough, but there was also the vast fatigue of the people of Nalofix to be reckoned with. Kasmus, for the first time in his life, nearly found it too much effort to travel to his laboratory. He had to force himself to it, and once there he flogged his aching brain to an understanding of the problem.

Selda, every bit as weary as the Master, was present as usual, glancing surreptitiously ever and again towards the still humming calculator in a corner of the laboratory. He bowed to the ruler as he entered and then continued perfunctorily with the charts upon which he was engaged.

"Something, somewhere, is amiss," Kasmus said, looking about him. "You must be aware of it, Selda."

"I am, Master, yes—but I cannot explain it."

"Age!" Kasmus clenched his claw and brought it down hard on the bench in front of him. "Age! That is the cause of everything! The city is corroding slowly; the landscape is warping, the vegetation is dying—and we ourselves are weary with the leaden weight of accumulating years. For some reason Time is operating normally, and we are being swept along in the midst of it."

Selda gave the slightest of starts, trying to imagine what had brought about the very thing which he and Mazro had been planning to do.

"How—how is that possible, Master?" he asked, puzzled. "Only yesterday you said you had not solved the riddle of Time. Why should it so suddenly start to operate in this fashion?"

Kasmus eyed him for a moment. "I also said that Nature might find a balance—though I hardly expected it so quickly. I wonder if it is possible that I——"

He did not finish his sentence. Instead he crossed to the calculator and studied it. Selda, watching cautiously, saw him frown and then check the numeral switches. He turned abruptly, but not so abruptly that Selda did not have time to drop his gaze.

"The cause of our trouble is here!" Kasmus snapped. "This machine, which I set last night to work out Sector 19 of the Siderial Calculus has instead entered into some profound calculation of its own. It is affecting matter, space, and—and Time! The instruments show it."

Selda ceased working on the charts and, pretending a quite convincing surprise, asked a question. "Do you mean, Master, that the Time-circle you photographed is actually being influenced by this?"

"Exactly! You think it impossible, I suppose?"

"No. You warned me against believing *anything* could be impossible. I am just curious."

"Just what has really happened I don't yet know—but I'll find out. The fact remains that mathematical vibrations can upset any balance of atomic aggregates. Leave me, Selda. I must have complete isolation whilst I work on this problem. We may be faced with unparalleled disaster."

"Yes, Master." Selda bowed, turned, and departed—and thereafter wasted no time in reaching the city and contacting Mazro where he worked in the Central Physical Laboratories. His position was such that he could easily leave his post and spend a brief while with the adviser in an ante-room.

"The one thing we wanted, Mazro, is here!" Selda could hardly get the words out in his excitement. "You must have noticed the change that has come upon everything? The evidences of sudden age?"

"Naturally I've noticed, and the effect is progressive. Hour by hour age is getting a firmer grip. But what of the Master? How does he explain it?"

"As yet he doesn't—at least not in detail, but he is definitely convinced that the calculator is the root cause of the trouble. We did something last night, Mazro, when we fed those figures into the machine. Just what I don't know——"

"Nor shall we ever. Nothing could be more mystical than the effect of mathematical vibrations upon a calcu-

lating machine. It patterns those vibrations into orders and geometrics undreamed of in the mind of living beings."

Mazro became silent for a moment, weighing up the situation, his eyes on the faded metal of the floor.

"This is our chance," Selda continued. "Normal death can occur now—not only to us, but to the ruler as well. If we want to strike, we can do."

Mazro shook his reptilian head slowly.

"What!" Selda stared at him. "Don't you realise that the thing we were hoping to do has come about by accident? What are we waiting for?"

"Security, my friend. To destroy Kasmus now is quite feasible, I agree, but would it do us any good? I doubt it. If we ruled in his stead we would inherit a planet which is very rapidly ageing. In a brief while it may be dead, and so will every living thing upon it. Where would be the point in ruling a dying world?"

"Kasmus will have to do so. Why can't we?"

"Kasmus will *not* do so. He is not that kind of a man. He will have some plan to suggest whereby we can go on living even if the planet is dying. When we know what that is—and not until—we can act."

And Mazro, always cautious, refused to be drawn any further. Certainly there was nothing Selda could do about it. Though he had scientific skill, he was not a specialist, nor at heart had he the courage and ruthlessness of his companion in intrigue. So there was nothing for it but to wait and see what Kasmus had to say next.

His report was expected hourly, not only by Selda and Mazro, but by every man and woman on the planet. All were aware of the vast change coming over the face of things and of Nalofix's rapid devolution. Some of the foremost metallurgists had already warned that within a few days the master-city might actually fall apart from sheer old age! Not that Kasmus was deaf to these warnings. He was working constantly to solve the problem

of the calculator, and until he was ready to speak the populace had to contain itself in patience.

Altogether it took the ruler three days and nights of grinding toil to work matters out — then his face appeared on every telescreen on the planet when he addressed the special convention of scientists in the Administrative Hall.

"To tell you, my friends, that our planet—and we ourselves—have both entered into a phase of retrogression is needless," he said, referring to his notes. "It is visible around us. Everything is dying at an incredible rate. Before very long this planet will have reached a senility equalled only by our neighbour worlds. Then, I think, the retrogressive movement will slow up. In other words, we are making up the devolution which should have been ours through unnumbered centuries.

"To explain the problem in detail is difficult, and indeed pointless, for we obviously cannot exist on a world which is rapidly losing its virility, nor can we as living beings continue to tolerate a state wherein we grow old and die when we have so much still to accomplish. Stated briefly, it would appear that a calculator-machine in my laboratory got out of order and, instead of determining the particular problem I had set it, it released unexpected mathematical essences which affected the Time-circle in which we move. Our immunity to age was caused by a perfectly circular Time-ring in which there was no gap. Now there are three—small ones—but sufficient to break the continuity. We shall reach the first of these gaps in about three months' time. When that happens I fear we might be utterly extinguished because we shall swirl into non-space-Time.

"The speed of our backward retrogression is simply that Time is now restoring its own balance, as a dammed river when released will level itself. All this apart, our wonder world of Nalofix is a wonder world no longer, and the only remedy is to depart from it."

The intense silence of the hall was suddenly broken by

the murmuring of voices; then one of the scientists rose.

"You speak of departing from this world, Master. To where? Have you considered that?"

"As yet, no. Obviously, in searching for a new habitat we cannot afford to leave anything to chance. I wish all those in the Astronomical Section to be present in my Observatory to-night. We must work henceforth to find a suitable world. Whilst this is proceeding I hand to the metallurgists the task of making twelve space-cruisers in which the finest of our race will be transported."

"Twelve?" Another scientist jumped up. "Twelve cruisers to carry fifty thousand souls? It isn't possible! You will need hundreds of machines."

"I said twelve, my friend. The twelve will carry the fifteen per cent of our race which can be considered intellectual. The remaining eighty-five per cent will stay behind."

"To die!" objected another.

"No. Merely to continue living on a world which is slowly dying—unless my estimate of three months does indeed plunge this planet into a non-space-time——" Kasmus shook his great head. "I do not propose to argue the point. Twelve machines can take all that is necessary of our race, and all its treasures. The remainder—the workers, the ordinary beings, must fend as best they can, perhaps throwing in their lot with those on the neighbouring worlds which we have conquered."

"I do not think your edict will be well received, Master," Selda murmured, seated at the ruler's side.

"I am quite prepared for that—but in an emergency only the fittest can survive. To-night we shall commence our search for a suitable planet."

Kasmus had nothing more to say, and his edict was final, but an ugly mood of resentment passed through the masses of the people when they realised that, doom or otherwise, they did not even enter into the ruler's calculations. In fact, had not Kasmus been such a

closely guarded personage there might have been ugly scenes. Mazro, indeed, did all he could through various "agents" to foment unrest for, now he knew the facts, he would have liked nothing better than to take over control and establish a scientific dynasty on some other planet. But all his efforts were baulked. Kasmus was surrounded by every conceivable protection for he knew exactly the kind of storm he had unleashed.

That same evening, as ordered, the members of the Astronomical Section gathered in the mighty observatory linked to Kasmus's laboratory. Here they assembled round a vast "lake" of mercuroid sunken into the floor. Upon it, trapped by the light-photon tubes above, lay the image of the heavens, Kasmus himself controlling the apparatus from a master keyboard. Here, definitely, was one of the greatest telescopes ever invented. Not only did it reach untold light-centuries into space and produce a clear image on the mirror, but it also gave simultaneous spectroscopic readings and analysed whether or not the body under observation had atmosphere and, if so, its exact content.

"It no longer becomes a question of finding a world which can give us eternal life," Kasmus said. "It becomes a question of finding any world whereon life can exist. My later calculations have shown me that the doom of Nalofix is inevitable three months from now—so we must go, even if we have to cruise space until we locate a suitable planet."

Nobody in the assembly spoke. They were too busy watching the mirror as the vast misty sluices of the Milky Way were imprisoned in reflection. Countless trillions of suns and nebulae, pouring out their energies into eternal space, but nowhere a sign of a worthwhile planet. There were dead ones, poisonous ones, dangerously young ones, but none which were mature. The whole night passed in ardent study of the deeps and found the astronomers of Nalofix no nearer a solution of their problem.

"We shall search until we do find a world," Kasmus stated simply, when dawn was breaking. So the next night the assembly met again.

To all quarters of the void the telescope penetrated, yet still there was no evidence of a planet suitable for Nalofixian type of life. Either the worlds were too big or too small—with consequent gravitational troubles; or else their atmospheres were totally unsuitable for the lungs of the searchers.

"I am becoming haunted by the grim thought that perhaps no planet ever repeats the same qualities twice," Kasmus said, as the hours went slowly by. "Perhaps Nature does not make two worlds alike. Even our own neighbour worlds have slightly different atmospheres to Nalofix, and they are all part of the same System. What then of other Systems? Are they so totally different that we cannot find one planet anywhere which is suitable for us?"

The thought was grim enough to plunge the assembly of astronomers into gloomy silence for a while; then one of them asked a question: "Master, have you used the absolute limit of range which this telescope can reach?"

"Not yet."

"Then might I suggest that you do so? We have covered every section of space within a fixed focus. Why not try other systems and worlds, the unthinkable distant ones? Something might lie in the outer deeps."

"At least it can do no harm," Kasmus agreed, and adjusted the controls.

In consequence the reflections which came to the mirror were less bright than their predecessors. The telescope was now using its maximum power, drawing light-photons across inconceivably vast distances. Since there were limits to what the instrument could do the results were none too good. But at least there was outline, and the slave-meters still registered satisfactorily.

"Nothing," Kasmus sighed, as the stars moved slowly across the mirror under the action of the instrument's

turning. "A thinning out of the stars, certainly, so maybe a better chance for more developed systems, but——"

"Wait!" one of the astronomers exclaimed abruptly. "You passed the telescope over a G-star at that moment when you looked away to speak. Back to it, Master—quickly!"

Immediately Kasmus set the machinery in reverse, and the huge instrument tracked backwards to the spot in question. A blue white point occupied the centre of the mirror and around it, more or less evenly spaced, were nine worlds.

"A perfect System!" Kasmus cried in delight. "Nine worlds, even as we have, therefore we may expect fairly similar conditions—and a G-type dwarf star for a sun, as we also have."

He left the telescope control board, locking the instrument so that the image remained steady despite Nalofix's own revolution.

"A young System, too," one of the scientists commented. "Notice the blue-white of that primary? Only youth can give that. What are the readings, Master?"

Kasmus was already busy with the meters, noting down their findings. He could hardly control the excitement in his voice when at last he turned.

"We have it! We definitely have it! One of those worlds, the fourth from the primary, is eminently suitable. It has a diameter of 4,400 miles, as has Nalofix, and a rotation period of 24 hours, which is very close to our own. Atmosphere of oxygen, nitrogen, krypton—Yes! And a gravity all but identical to our own."

"Which demands nothing more of us than that we travel to it," one of the astronomers remarked dryly.

"It conforms very closely to our own world, certainly," Kasmus admitted, "and apparently it is at the peak of its life. Clouds are detectable, you notice? Through the breaks there are signs of some kind of vegetational landscape. In fact it is the only world in that

System of nine which is suitable. The others are too youthful and, judging from these meters, the outer ones are still molten. But that one world—— Yes!"

"We should give it a name, Master. Not just the usual index number."

Suddenly, with the relief of the moment, the conversation had become almost light-hearted, then one of the scientists made a suggestion.

"What better name, Master, than 'Destiny'? There could not be a better appellation?"

"Destiny it shall be," Kasmus assented. "But, whilst I am as jubilant as you at finding this possible sanctuary, I think I should remind you of a major problem. That planet, though so brightly visible on the mirror here, is nine hundred thousand light-years distant from us! To try and reach it would take us untold lifetimes and, unhappily, we are no longer eternal. Not that we would be in any case once we travel into outer space."

"You are assuming, Master, that light is the governing factor of the Universe," a mathematician commented. "I know that we generally assume 186,000 miles a second to be the ultimate speed, but I insist—and always have insisted—that we only use that measure for convenience. Why should an object or light-photon become minus-zero once it exceeds the velocity of light? I never could see the basis for such assumption."

"You believe, then, that speeds greatly in excess of light can be reached?" Kasmus questioned.

"Certainly I do. Thought-waves alone move faster than light. With a thought we can bridge the whole immeasurable gulf of the Universe in a split second. Thought is only a vibration, same as light, so surely the relationship is plain?"

Kasmus considered the infinitely far system for a while, his eyes on that one world where there might lie sanctuary.

"In our space travelling we have never needed to exceed the speed of light, or even approach it," he said

finally, "but I suppose a test could be made. And I mean a real test. To prove on paper that light-velocity can be exceeded is not enough: in actual practice there may be other factors. I propose that a model space machine can be constructed with a power-plant capable of generating four times the normal emission of atomic force. It can be set off from Nalofix in an eccentric orbit, which will finally bring it back to us. Simple calculation will then show us at what speed it has travelled."

The scientists nodded agreement.

"And should we find the speed of light cannot be exceeded, what then?" one of them asked.

Kasmus shrugged. "It is not my policy to work on a problem until I know it exists. If the experiment is a failure, then we must think further. In any event, the fact remains that the world which we have named Destiny is to be our destination, and to reach it we will use every conceivable scientific resource in our possession."

* * *

Within three days the model projectile was completed, but its departure into space went unsung, watched only by the scientists concerned, each one of them conscious of how much depended on the machine's behaviour. Mathematically set to an eccentric orbit it would eventually return to its starting point on the roof of the master-laboratory, and once it did so the instruments within it would show exactly what could be expected of a full-sized machine.

The discovery he had made, that Nalofix was definitely doomed to extinction in three months, did not cause Kasmus to change his plans in the slightest degree. He did not even inform the people who were to be left behind what was in store for them. His only concern was in preserving the flower of the race—men and women—so

that the race could continue to expand. The remainder he did not even countenance. He gave orders for the most valued of the machinery to be dismantled and, behind the scenes, this great work went on whilst with every hour the signs of increasing age bit deeply into the planet.

The metallurgists' estimate that the city would rapidly fall to pieces proved to be unfounded. Once the initial grip of advancing time had tightened itself the retrogressive action slowed up somewhat, due to the incredible hardness of the metal of which the city was composed; but that dissolution must come finally was obvious. The probability was that extinction would arrive far sooner than the normal process of decay.

Throughout the days which followed, as he helped the Master in the packing of charts and irreplaceable records, Selda did a good deal of thinking, and at the first opportunity he sought out Mazro and put his speculations into words.

"You said, Mazro, that once you knew of the Master's plans you would strike to be rid of him. Why don't you?"

The physicist gave his acid smile. "Because, even now, the moment is not propitious. If we brought about the death of the Master and took his place we would have the entire responsibility for colonising our race on this far-off world to which we intend travelling."

"Would that matter? We are capable of it."

"Frankly, I do not think that we are. Domiciling a wandering race is one of the hardest tasks imaginable. It demands a far-reaching scientific wisdom, as well as a profound understanding of the people to be controlled. In that direction I know my limits—and so, I imagine, do you. No; let Kasmus get us well established on the new planet, let him reveal whatever scientific secrets he has buried away—as he will be forced to do in this new venture—and then we will act."

"From these constant procrastinations I begin to won-

der if you really wish to take the Master's place," Selda remarked.

"There can never be any doubt of that, but I am not such a fool as to add responsibility when I can evade it. Incidentally, I assume the Master does not suspect that it was our activities which brought about the doom of his planet?"

"He hasn't the least idea of it. He assumes the calculator developed a fault—as you heard him say when he made his speech."

"All to the good. He still trusts us, which will make it all the easier to strike——"

Mazro glanced up sharply as the alarm system in the ceiling suddenly buzzed emphatically. Swiftly he crossed to the control panel and pressed a button, which immediately identified where the signal had come from.

"From the master-laboratory!" he exclaimed in surprise. "The Master must require us immediately——Come!"

He and Selda wasted no time in travelling to Kasmus's scientific retreat, to discover to their surprise that a large party of the ruling scientists had also arrived. They were congregated in the great laboratory's central room, gathered about a pock-marked pencil-shaped object which, despite heat-neutralisers, was still emitting a good deal of warmth.

"The model projectile!" Selda exclaimed, astonished. "It has returned so soon, Master?"

"Yes—far sooner than we ever imagined, and let us hope it augurs well for the possibilities of our journey. We will soon know."

Kasmus switched on cooling beams and, gradually, the heat of the projectile began to fade, a heat which had obviously been generated by its final terrific speed through Nalofix's atmosphere. None the less the various devices within it had functioned perfectly, and it had landed without damage.

"Now—let us see," the Master breathed, unscrewing

the end of the model, and with a gentle movement he drew forth the whole array of instruments set with uncanny precision in a rack. Intently he and the assembled scientists studied them.

"I was right," proclaimed the mathematician, who had insisted light was not the greatest speed of the Universe. "According to these instruments this machine at its maximum velocity reached the unbelievable momentum of one million, five hundred thousand miles a second, which is eight times the velocity of light! I said it could be done."

"Which is one case where theoretical mathematics are at variance with actual fact," Kasmus agreed. "From this we also know something else. Our power quotient on the atom-plant gives us a multiple of two. In other words, for every extra unit we add to the power-plant we obtain three hundred and seventy-two thousand miles per second greater velocity. Very well then, by increasing the power-plant units by six or a dozen we automatically step up our speed. By simple mathematics we can work out a power-plant which will easily enable us to make the crossing within a reasonable time."

"But will our physique stand up to such vast speeds?" Mazro questioned.

"Normally, no. In fact the initial shock of the take-off might very easily destroy us, so I suggest it be done by suspended animation. By that means everything will be automatic, and we shall sleep during the voyage."

"In which case," Selda pointed out, "it would not really signify how long we take. When in suspended animation our metabolism drops to zero. There is only the merest thread to keep life going. If we took ten minutes or ten million years on the trip it would hardly signify."

"In that you are not entirely correct, Selda," Kasmus responded. "Suspended animation is a vast benefit, I admit, but even in that state we age slowly. Our best

plan is to make the trip as rapidly as possible and reduce our physical functions to zero during the process. You, Fanzian," Kasmus glanced at the chief mathematician, "had better work out all the details concerning the size of atom-plant needed and the period for which we must remain asleep."

"Very well, Master," Fanzian agreed.

Upon this Kasmus brought the meeting to a close. The remainder would be taken care of by mathematics.

CHAPTER THREE

Fanzian's mathematical efforts occupied him ten hours and at the end of that time, aided by machines, he had worked out all the necessary details and submitted them to the Master. Once he had checked the figures Kasmus came as near to jubilation as he ever did.

"We can do it, Fanzian," he exclaimed. "It will take us fifteen years and nine months to make the journey—but of that we will not be conscious since our faculties will be dormant. Thank you for all you have done. I will now make the final arrangements."

From that moment onwards the master-city of Nalofix became rather like an overturned ant-hill. There was ceaseless activity as the twelve mighty space cruisers ordered by Kasmus were rushed to completion. Night and day the precision engineers worked on the instruments needed for the voyage—instruments delicate beyond belief, upon the absolute accuracy of which would depend the lives of those sailing through the void to their new home. In other directions vast armies of clerical experts went to work to tabulate everything which was to be carried on the trip.

The task of the removal would have been big enough in the normal way, but in this instance it was hindered constantly by bands of mutinous workers who, resentful at the knowledge that they were to be left behind, did all in their power to smash the great exodus. Kasmus, prepared for such an eventuality, was only caught out

once—when one of the machine-rooms was totally destroyed by atom bombs—then he struck back with all the power at his disposal. Air and ground squads moved in to guard all centres of activity, and any unauthorised person was instantly de-atomised if they dared show their faces.

Defeated in this direction the Doomed Ones, as they called themselves, took to raining curses on Kasmus and his project by every possible means. Illegal radio stations branded him as a murderer; his name was vilified from one end of the planet to the other. He was warned of the disaster that would befall him for being so pitiless towards eighty-five per cent of his subjects. To all of which Kasmus turned a deaf ear, absorbed as he was in the problems of departure.

So finally, with only two weeks to go before Nalofix must make the plunge through the break in the Time-circle, the twelve cruisers were ready and loaded with every conceivable necessity for the enormous journey through space. Every man and woman was in his or her appointed place whilst outside tens of thousands of the Doomed Ones still screamed their curses unto the end.

"Fools, all of them," Kasmus commented cynically, as he sat before the control board of the leading vessel. "They simply have not the intelligence to appreciate that only the best must be saved. I sometimes think it is a pity that a race breeds so much that is useless and so little that is worthwhile. So be it. Nature is ever prodigal with her mistakes."

He snapped over the power-plant lever into its first notch, not even troubling to give warning of his intention. In consequence a blinding, searing foam of exhaust blasted into the midst of the yelling hordes, de-atomizing hundreds on the spot and savagely burning those who tried to stumble out of harm's way. Completely unmoved, Kasmus watched the meters as the huge machine leapt away.

In a fraction of a second the monster had flashed

through the successive layers of atmosphere and was in the vacuum of outer space. To the rear trailed the remaining eleven machines, all spouting flaming incandescence as they battled against the gravity in the take-off.

"Proceed by automatic control to maximum velocity," Kasmus ordered into the radio. "Commence suspended animation when course has been set." He switched off and gave a brief glance at Selda by his side. "Set the course," he commanded.

Selda nodded and did as he was ordered. Kasmus kept his gaze on the instruments or gave orders to the power-plant control room. Around the vessel there was now nothing but the utter black of space and the titanic galaxy in the midst of which the Nalofixian system lay. It would be many hours, even at maximum velocity, before that enormous nebula-field with its diameter of 50,000-light-years began to show signs of shrinking. Only then would the real trip begin across the uncharted wastes.

"Course charted, Master," Selda said presently, and moved aside for Kasmus to study the maps. He nodded, set the instruments to the angle required, and then—labouring under the crushing inertia-drag—he hauled himself out of his seat.

"Our part of the task is done," he announced. "To the suspended animation chamber."

There was no hesitation amongst the others—Selda and Mazro included. Neither of them had any plans in mind at this stage, in any case. Not until the enormous journey was over and Kasmus had done all the spade work were they prepared to step in and try and reap the benefit.

In silent procession the men and women assigned to this particular vessel—and those in the accompanying vessels also—filed into the huge but comfortable chamber in the centre of the machine and settled upon the air-beds assigned to them. In every direction robots, calcu-

lated to run for twenty years on their atomic batteries, were in attendance. There was also a grouping of complicated instruments, alarm signals, and every conceivable device by which the beings of Nalofix hoped to preserve their lives until the very end.

Kasmus's last thoughts as he surrendered himself to the slowly deadening cold of the chamber were of pride in having dared to attempt this stupendous journey, the greatest that any living beings—as far as he knew—had ever dared to make. Then his mind blanked out and his physical reactions dropped to zero.

* * *

Whilst the occupants of the twelve cruisers slept, oblivious to the crushing load of acceleration, the machines built up a truly terrifying velocity, sweeping across the vast reaches of the void with no resistance whatever. So well had the course been planned, and so reliable were the repulsor-shields, no masses of matter ever came near enough to the vessels to affect them with their gravity. It was a soundless onrush until the ultimate speed had been reached, one million five hundred thousand miles a second. Only then did the power-plants automatically cut out and, space offering no retarding drag, the velocity was constantly maintained.

Within a year the Nebula of Andromeda had at last begun to shrink visibly in size, and Nalofix itself had vanished completely, whether through it plunging into non-space-time, or because of distance would never be known. The cameras aboard the ships, automatically set, made periodic recordings for future study—and so the journey over the intergalaxial abysses continued, year after year, year after year, one and a half million miles flashing by with every second, yet so inconceivably vast is space the machines might have been standing still when compared with the movement of the stars behind them.

Timed almost to the minute, fifteen years later, the reactionary systems began to work. Motors started up, spindles began to revolve, gauges reacted. Temperature and normal air slowly returned to the suspended animation chamber. Kasmus came from a deep, dreamless sleep to the awareness of tingling limbs as blood circulated once more in his veins. With no more hangover than if he had passed the night normally he clambered from the air-bed and looked around him upon the slowly reviving figures.

He did not wait for them. Impelled by eagerness he hurried into the control-room and looked intently through the observation window. Everything had worked out perfectly. Ahead of the vessel, no more than twenty million miles, was the outermost planet of the unknown system, and behind it eight other worlds and, centrally situated, the bluish-white luminary.

Selda came into the control room, and then Mazro. In silence they looked outside and then back to the Master. "We have done it, Master," Selda said, and glanced at the instruments. "And our speed is slowing down by thousands of miles a second."

"And it only seems yesterday that we settled down to sleep," Kasmus replied. "A yesterday fifteen years ago—as the automatic calendar shows us."

Selda and Mazro glanced at it, and since it was controlled from the power-plant there was no doubt that it spoke the truth. Exactly fifteen years had gone since Nalofix had been left.

"Our new home looks promising," Mazro commented, studying the fourth planet from the sun intently. "In a matter of two hours, or even less, we should reach it."

"One hour and fifty minutes to be precise," Selda stated, calculating swiftly.

"We have time to restore ourselves with foods and essences," Kasmus said, "then we must bend all our energies to making a safe landing."

He turned to the radio, ascertained that aboard the

eleven other machines all was well, then he led the entire party of his own vessel into the great room set aside for meals. It was almost a celebration banquet with the Nalofixian wine flowing freely and Kasmus in his most benevolent mood. The meal had finished when he made his final comments.

"Such an occasion as this may never occur again," he said gravely. "We have before us a new world, of which we, as yet, know virtually nothing. It would appear to be uninhabited and, if so, our task is made that much easier. If on the other hand it contains living beings hostile to us we shall either crush them, or be crushed. There is only one law in the Universe—the survival of the fittest. We of Nalofix do not ask questions or give ultimata—we strike, or are vanquished. If we should meet defeat we will accept it as completely as we would accept victory. With that in our minds, my friends, the knowledge that we are supreme scientists bent on mastering a world, we come to 'Destiny'."

Thirty minutes later, his words took effect when the machine swept through the upper clouds of the fourth planet and then dropped swiftly down to a landscape clothed in brilliant green verdure. Kasmus made the landing with scarcely a jar and the journey across 300,000-billion miles was ended.

"Atmosphere exactly as we read it on Nalofix," Selda stated impassively. "Gravitation equal to that of Nalofix. Humidity within ten per cent of our own."

"In fact it has only one thing lacking," Kasmus sighed. "It cannot give us everlasting life—as Nalofix did before some fluke of mathematics destroyed the condition."

Selda's eyes strayed for a moment to Mazro, then back to the Master.

"Perhaps," Kasmus mused, "there may be other ways of achieving eternity. I must work on that problem when our other difficulties are solved. For the moment

we will make a circumnavigation of the planet and assure ourselves that it is a world without life."

He gave the order over the radio and the entire fleet promptly took to the air with normal flying mechanisms and, within thirty minutes a complete circuit of the globe had been completed. Nowhere, apparently, was there a sign of life. Only the rich jungles and gentle oceans, freezing slowly as the poles were reached. In fact as fair a planet as could be wished for.

"So be it," Kasmus said, when the machines had settled again. "Here on this jungle continent we will establish our first and major city, and after that we will spread our activities over the whole surface. To work, my friends. There is much to be done."

Almost immediately, there began the task of unloading the equipment with which each machine was packed. For the time being it was decided to use the space-cruisers themselves as domiciles whilst the actual building of the city began. First the jungle was incinerated with atomic beams for a distance of ten square miles, and all possible roots which could cause trouble later were destroyed with corrosive poisons. Then, to the plans already designed by the experts, there began the foundations of what was to be the major city.

Weeks expanded into months, and there came nothing to deter the scientists of Nalofix in their chosen purpose. No alien life presented itself. The only change was in the climate, which gradually became bitterly cold with winter—except where scientific devices created a perpetual thaw—and with exacting thoroughness the city began to take shape, almost a duplicate of the one which had been the recognised capital of Nalofix.

Selda and Mazro, engaged like everybody else in the city's construction, watched its gradual growth, and to Selda at least it brought a return of the ambition always closest to his heart. "How much longer do we wait?" he asked the physicist, as they laboured together on the construction of the city's main power room. "We know

now what his plans are, and yet we make no move. Things could not be more propitious to be rid of him. A simple accident and——!" Selda tossed down a multi-spanner expressively.

"Simple accidents do not happen to such as Kasmus," Mazro replied drily. "The time is still not favourable."

"I don't agree. You once upbraided me for being over-cautious! You are infinitely worse!"

"This city has yet to be equipped with all the machines of Kasmus's creation," Mazro explained patiently. "If he were to die we would lose those benefits for nobody else understands science as he does. I personally shall make no move until such time as everything is complete and we have before us an unbroken vista of achievement. That time will come, my friend—have no fears on that."

"If we don't die first. Remember, we are not eternal on this planet."

"Not yet. Kasmus has something in mind. He refers to it often, but I have not been able to draw him out. You, as his adviser, may finally be more fortunate."

Greatly to Selda's surprise, this was the very thing which did happen though not until some months had elapsed. By this time the spring had come again, and the master city was all but complete—sufficiently advanced anyway for Kasmus to leave matters in the hands of his lieutenants whilst he devoted his tireless mind to less routine activities. As adviser, Selda was the first to hear of a new conception absorbing the Master's mind, and to this end was summoned one morning to the new master laboratory.

"You, Selda, are an excellent all-round scientist," Kasmus said, when the normal greetings were over. "I think you may be able to assist me."

"You are more than kind, Master," Selda murmured, the sycophant once again. "If I can help you in any way I——"

"You will, of course. I appreciate your loyalty to me,

my friend. That is why I have decided to use you. Please be seated."

Selda obeyed, and he still had emotions enough to feel a twinge of conscience at the implicit faith the Master had in him. He inwardly wished he had Mazro's cold-blooded outlook upon everything—it would have helped considerably.

"As you know," Kasmus continued, seated at the other side of the broad controlling desk, "the one drawback to this otherwise favourable planet is that we must grow old—and die. Not with such sudden inevitability as would have happened on Nalofix, of course, but none the less it must come. And there is nothing I abhor more than an uncertain future. I have so much to do. I cannot allow death to intervene."

"No, Master," Selda agreed dutifully.

"Since this planet is not timeless it means that to make ourselves deathless we must work solely on our own bodies and find a way to stop them ageing. Age, as we know, is caused by ketabolism — the breakdown of cells. Once we can arrest that we can be eternal."

"Agreed," Selda responded. "But long ago we found that only something inherent in space itself can prevent age."

"Or create life," Kasmus said quietly, and as Selda looked at him in surprise he continued, "I am convinced that the power that can create life can also prevent age. It is only logical to assume so, and that power must be a radiation somewhere which we, with all our scientific skill, have never been able to find."

As Selda passed no comment Kasmus continued: "We know, from the records taken in our space machines as we crossed the gulf, that not one single planet, great or small, in all that abyss of three hundred thousand billion miles contained life! We also knew on Nalofix that our planet and its few neighbours were the only ones within measurable telescopic range containing life. Why is Nature so prodigal in her creation of worlds, yet so

frugal in creating life to populate them. By that I mean intelligent life, of course, not vegetational."

"Presumably because intelligent life is an accident—a rare thing," Selda responded. "This very world we are on now, for instance. It contains no intelligent life whatever, even though the conditions are ideal for it."

"Nor do any of the eight neighbour worlds," Kasmus responded. "Which leads me to believe that we alone, save perhaps with a remote exception somewhere else in the universe, are the only favoured ones. We, and the few thousands of the neighbour worlds of Nalofix, perhaps represent the only form of intelligent life in the Universe. So I ask: how did we come into being in the first place? If we can find the answer to that we can also, I believe, find the answer to eternal life. Something in the remote past stirred inert chemical matter into life, and it evolved into an intelligent thinking being. What was that something?"

"It could only have been a radiation of some kind," Selda responded. "The Universe is a maze of radiations, some of them commonplace, like the light and heat, but others so complex we hardly understand them."

"But we are going to," Kasmus declared. "And it is to that end that I need your help. We are going to analyse every known radiation and try its effect on inert chemical. Somewhere in the inconceivable number of wavelengths that exist we may find the one we want."

"A prodigious task," Selda commented, thinking.

"I am aware of it, but we have nothing else to occupy us, so what better than to spend the time finding a way to defeat death. Once that is done we can dare to ponder the greater problems, problems which cannot be faced as long as there is the fear of death cutting short our activities."

"In all things, Master, I am naturally your servant," Selda murmured, "but I would venture a suggestion."

"By all means."

"I am an all-round scientist, as you have been kind

enough to say, but I am not a specialist. You are looking for some unknown type of radiation. I, in my ignorance, might quite easily pass over something quite vital. Why not have a second helper in the person of Mazro?"

Kasmus did not respond immediately, and Selda waited anxiously. Sensing ahead of him a vista of great opportunities which might be used to "involve" the Master he had no faith in his own powers of destruction. But with Mazro at his side a great deal might be possible——

"Mazro is undoubtedly an expert physicist," Kasmus admitted, musing, "and he has done excellent work in the past, particularly in the field of intra-atomics. But he is not my adviser and trusted confidant——"

"In a matter like this, Master, involving such enormous issues, I suggest that only the best brains be considered, status notwithstanding."

"Very well. Mazro shall help us also. I will inform him of the fact. We will commence work to-night since after sundown the incoming radiations from space are much more easy to detect than when bent aside by the sun's magnetic field. That is all, Selda, thank you. We are venturing into an unexplored territory."

"In many ways, Master," Selda agreed calmly, and with that departed—nor did he waste any time contacting Mazro as he worked in a deserted corner of the giant power-room, using his almost uncanny skill to assemble an atomic generator. He listened in silence to all Selda had to say, his talons meanwhile lacing together a bewildering intricacy of feed-wires.

"To the best of my knowledge," he said, "life began when an ultra short wavelength excited energy into otherwise inert chemical cells. The effect was catalytic and, possibly, quite accidental—which accounts for the rarity of life in the Universe. In trying to locate that I fancy the Master has assumed an almost impossible task."

"Impossible or otherwise we can both work beside

him." Selda's voice betrayed his immense enthusiasm. "If we are successful in finding a wavelength which does produce eternal life, then we can use it on ourselves and, before Kasmus can adopt it, we can eliminate him. We'll also have that excuse that in the laboratory almost any accident could happen to wipe him out."

"True," Mazro admitted, pondering. "Yes, my friend, I see your point. Rulership is indeed worth having if one has eternal life in which to expand one's ideas, otherwise it is not worth the risk of wresting power. But I have immense doubts that the wavelength Kasmus is seeking will ever be found."

"The fact remains that from here on we shall devote our time to looking for it. We must find it, if only to bring our own plans to fruition."

CHAPTER FOUR

The following day, by Kasmus's order, Mazro was relieved of his duty in the power-house and took his place beside Selda in the master-laboratory. It was plain from the ruler's manner that he had not the least suspicion that either of his two assistants was plotting his downfall, otherwise he would not have been so liberal in his explanations of scientific mysteries. He revealed practically all his secrets, as indeed he had to do if the two underlings were to understand how to control the various complicated machines.

"This device," Kasmus explained, indicating an enormous electronic machine of exceptional sensitivity, "is the one upon which I pin our hopes. It is designed to register wavelengths as short as a thirty-second of a million millionth of a centimetre. That is, possibly, the shortest wave in the Universe. If such a wavelength exists, this machine will find it. And if it does find it, then we will set to work deciding how such a wavelength can be trapped and used—or, failing that, duplicated. You, Mazro, will control this machine whilst you, Selda, will make readings of the reaction meters. I will meanwhile study the cosmic charts for the most likely sources of radiation."

So the search began and both Selda and Mazro were aware that it might be the beginning of years of arduous investigation before they received any reward. In the normal way they would probably have silently protested

against the Master's pet "fad," but since, on this occasion, they stood to gain something from it, they worked assiduously—and found nothing.

Days—weeks—months passed by as all the known radiations of the Universe reacted on the meters, from the deep red to the ultra-violet, and up into the cosmic frequency, but not once did they find anything unusual which was worth investigating. Finally it appeared that even Kasmus was becoming convinced they were on a fool's errand.

"I think, Master," Mazro said, when he and Selda had been called into conference with Kasmus, "that we shall never find what we are seeking for the simple reason that it must have happened when there was a gigantic explosion somewhere in space. Maybe a mass of matter fused, or collided with some other mass, with the result that devouring energies were released which, in turn, emanated their particular wavelength. We know that the rare event of an exploding star does produce a particular type of radiation which is not normally present."

"You assume," Kasmus said, "that somewhere in the remote past, possibly just after the birth of Nalofix and its neighbour worlds, there was a mighty explosion in outer space, the energy from which affected inert chemical upon Nalofix and—in the fashion of a catalyst—brought it to life?"

"That is my assumption," Mazro said; then he shrugged. "Obviously, it may be untold generations before a similar explosion happens again."

"Unless," Kasmus responded slowly, "we create one!"

It was at a moment like this that Kasmus revealed why he was the ruler of the race. If he did not possess a scientific opportunity he made one, no matter how gigantic the prospect.

"Make one?" Selda repeated, astonished. "But, Master, how can we possibly duplicate Nature?"

"To the north of the celestial hemisphere there are two stars separated by only three hundred million miles," Kasmus said, and pointed to the chart on the nearby desk. "I have named them K-19 and M-35 for astronomical reference. Their distance from us is ten light-years. We have apparatus which can project a beam of force over that distance, and since we know now that light is not a limiting factor we can possibly make our force-beam reach them in a year."

"And then?" Mazro asked.

"We can create a cosmic disaster, my friend. We can force those two stars to collide. The slightest untoward pressure can upset the mightiest body, so delicately is the balance of the universe poised. My proposition is to hurl at M-35 a beam of force. Since M-35 is the nearer of the two stars to us it will mean that when the force strikes it it will move away from us and towards K-19. Once that initial thrust has been imparted K-19 will exert its own gravitational pull and a collision between the two is inevitable in a very short time. At the moment of impact there will be released the same type of energy which, we now believe, created life on our world so long ago. On that occasion a natural collision evidently happened—or else an explosion. In any event we can try and duplicate it, and we'll see what happens."

"And a very intricate and dangerous task it will be," Selda mused.

"Intricate, yes—timed to the split second over a colossal distance. But why dangerous?"

"I am thinking of recoil, Master. When our force beam strikes M-thirty-five this planet will move backwards under the impact, surely? M-thirty-five is hundreds of times bigger than this world."

"Certainly we shall feel the effect," Kasmus agreed, "but we can devise bracing power beams on other stars, at the opposite side of our world, which will take the shock. It is our last gamble, and I intend to take it."

So to the huge designing and machine rooms of the

now complete city there went forth Kasmus's order for parts of a mighty forcebeam projector, and whilst it was being constructed a suitable site for its erection was decided upon, this being a rocky plateau midway between the arctic and temperate zones of the planet and far enough away from the solitary master-city not to affect it in any way.

Miles of cable were laid from a specially constructed power-house, and for months the scientists laboured on this new aspect of Kasmus's genius—or insanity. He had not sought the opinion of other scientists, as to whether this gigantic project was worth the endeavour. He simply knew what he wanted and meant to realise it, regardless of outside opinion.

But Mazro at least made capital out of the occurrence. Wherever he went he dropped hints that the Master was using his followers entirely for his own ends. This crazy business of trying to create a super-explosion in outer space was just some fantastic notion which consumed vast quantities of precious materials and held up other more pressing scientific commitments. In fact Mazro paved the way nicely for a change of leadership, which, when his chance came, would make it all the easier to take control.

None the less the projector was completed — a monstrous and complicated device of Kasmus' own design, rearing five hundred feet into the sky—within three months. After that it was a matter of mathematics to determine the direction of the beam across space so that it would strike M-35 at a critical angle once it had made its vast trip across infinity. So accurate were the machines employed to solve these basic equations that there was no possibility of error, and computation also showed that the beam should strike its object squarely in exactly eleven months and nine days from the second of its being released.

For power, atomic force was to be used, the 'greatest maximum output in the narrowest possible focus. So it

was that there was finally released from the projector an invisible shaft of force, containing within its circumference enough blasting power to hurl a dozen planets clean out of their orbits. All air and space fliers were warned of the extent of the area and thenceforth gave it a wide berth.

From the moment of release nothing could be done except wait, maintenance engineers being constantly on duty to see that there were no flaws in generation. One split second of non-projection would mean that the continuity would be lost and the whole business would have to start all over again, and there was no break. The flawless machines kept up the atomic emanation constantly, and the instruments, inspected daily by Kasmus, showed that the beam—powerful enough not to lose any of its efficiency as it travelled further from its source—was hurtling itself across infinity at the stupendous velocity of ten times that of light, 1,860,000 miles a second, the speed varying at times as vast dark masses of matter, unseen by telescopes, dragged the power aside slightly or had a retarding effect. But there seemed no doubt that mathematics had not lied, and that eventually M-35 would be struck.

The eleven months and nine days for the beam to make its journey were the longest periods Kasmus had ever known. But such was his nature he did not waste time fretting and waiting. He attended to urgent matters concerning the city's scientific expansion and the general colonisation of the waste regions of the planet, whilst in his spare time he dabbled into the mysteries of intra-atomic physics. For Selda and Mazro—back again temporarily in their normal routine work—there was nothing for it but to wait and see if the Master did find a radiation capable of producing eternal life. If so, then at last the time had perhaps come for action.

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Inevitably the time passed. At last there was only a matter of thirty minutes to go. At this momentous period Kasmus was in the projector power-house, watching the instruments, Selda and Mazro by his side awaiting orders and glancing at each other in tense expectancy.

"If M-thirty-five should be struck as we hope, it will only be a matter of hours before the 'kick' it has received sends it into collision with K-nineteen," Kasmus said. "But we have to remember that we can only know of this happening by these instruments. If we studied the event through the telescope it would be years before we saw anything happen because of the time taken by light-waves to come back to us. That is our guide," and he pointed to a long red sweep-needle moving up imperceptibly to a zero mark. "When that touches zero it should cease to function. If it does so it means collision has taken place."

"And then?" Mazro questioned.

"Everything is prepared, my friend. The radiation generated by such a collision as that will spread outwards into space and reach here in, possibly, two or three years, its speed being slower than that of the force-beam we've generated. By that time apparatus will have been completed which will absorb and trap the radiations on atomic brushes. Later the power can be released and the exact length and possibility of the radiation determined."

Mazro eyed Selda for a moment, but he said nothing. There was apparently still some time to wait before anything could be known. Like all gigantic scientific experiments this one was fraught with uncertainty and hag-ridden by delay.

In the silence Kasmus watched the sweep-needle. It was very close now to the zero-mark. Just a hair's breadth, and then it was upon it. It ceased to move—and at the identical second the planet itself swayed sickeningly back and forth, flinging all three of the scientists

to the floor and making the more delicate instruments shiver and collapse.

"We have done it," Kasmus breathed exultantly, getting up again. "That was the recoil we felt. Thanks to bracing power and beams on the opposite side of this world we have survived the shock. Now comes the anxious time—the waiting—the months between, whilst vast distances are bridged. Would that light moved instantaneously that we could watch this collision of two great stars in outer space."

Notwithstanding that this could not be, all three scientists surveyed the two stars through the reflector, to find them apparently as they had always been and at the normal distance from each other. The fact left them pondering on the illusory nature of light, then, because they were scientists, and trained to accepting the inevitability of mathematics, they turned their attention to other matters.

It was at this point that Kasmus added Fanzian to his number of assistants, and neither Selda nor Mazro were particularly pleased to hear it. They felt that the presence of the mathematician—summoned specially to compute the time which would elapse before anything definite could happen—boded ill for their own plans. He was known to be absolutely loyal to the Master and would prove a dangerous enemy to anybody trying to encompass Kasmus's downfall. This did not present an immediate problem, but it might do as time passed on.

The mathematician's estimate of time required for radiation from the collision to reach "Destiny" was two years and seven months, with a little latitude either way since he was not exactly sure of the speed of the radiation. In any case the information was sufficient for Kasmus, and he went to work immediately designing the necessary apparatus by which the radiation could be trapped as it flowed past on its outwardly expanding journey. . . .

In the beginning, two years and seven months seemed

a preposterously long time—yet it went by quickly, with so many other scientific matters to deal with, and the needs of an ever-expanding population to cater for. An evening arrived at last when the first signs of radiation ought to make themselves apparent, and it seemed paradoxical that the two stars which had created it were now destroyed, and yet visible in the telescope as completely untouched!

"We will adopt the same procedure as before," Kasmus announced, when he, Selda, Mazro and Fanzian were in the detection-laboratory specially designed for the task. "You, Selda, will watch the meters: Fanzian will compute the wavelength if there is any reaction, and you, Mazro, will assist me in operating the mechanisms for trapping the radiation on the atomic brushes."

The scientists nodded assent and prepared themselves for action. On the roof of the laboratory stood a slender tower some two hundred feet in height, a curious magnetic device at its summit, which would automatically absorb the radiation if any presented itself. Then it would be passed down to the laboratory to be trapped on magnetic brushes and stored as potential against the time it might have to be used.

The only one who seemed perfectly sure of results was Fanzian. He waited with the calmness of a man who knows exactly what to expect — and with justification, for towards midnight the first meters reacted before an inflowing radiation from outer space. Instantly each of the three men became alert, watching in amazement as the meters registered the power of the radiation, together with its wavelength.

"It measures one tenth of a million millionth of a centimetre, Master," Selda exclaimed. "There has never been a wavelength like that anywhere before, that I recall."

"Except, perhaps, when life was born," Kasmus responded. "Quickly—what is its power?"

"Seven million electron volts."

"Will the atomic brushes stand that load?" Mazro asked quickly. "If not we may get ourselves involved in trouble——"

"They'll stand it," Kasmus assured him quickly, "though I admit I had never expected such a tremendous load."

There was silence again as the scientists returned their attention to the meters. Apparently the field of radiation was of considerable extent for nearly fifteen minutes passed before the meter needles began to sink as the load decreased—and at length they dropped to zero.

"We have done well," Kasmus commented, satisfied. "We have only trapped a small percentage of the radiation, of course, but at least it may be enough for us to experiment—and there is no reason why we should not do that this very moment."

He turned and led the way into an adjoining chamber of the laboratory wherein lay the complicated mechanisms which had stored the unknown energy. A glance at the gleaming dials on the apparatus was sufficient to show the tremendous load which had been accumulated.

"You surely do not propose to test it upon yourself at this early stage, Master?" Fanzian asked in concern. "I say the risk is too great."

Selda and Mazro looked at him bitterly. Had this particular session been in their own hands they might have tempted the Master into committing suicide.

"Our first subject had better be vegetation," Kasmus decided. "We will see what affect the radiation has upon it."

He picked up a small plant in a pot from the bench nearby, a fernlike creation specially grown for the purpose. It was known that this particular plant was extremely sensitive, curling up even under the harsh breath of a cool wind. Kasmus set it on the table within range of the radiation equipment and then switched in the projector mechanism which would per-

mit a small percentage of radiation to escape in a thin but invisible beam.

For a moment or two the plant did not appear to be affected in the slightest. The scientists felt a tingling of static electricity around them and could smell ozone in the atmosphere—then, abruptly, things happened. The fern started to grow at prodigious speed. It increased its height by twelve inches in as many seconds, and shortly afterwards its hypertrophied roots smashed open the pot and cascaded soil to the floor.

Kasmus switched off, eyeing the plant intently. It was still alive but growth had ceased. His gaze moved to his three companions.

"Immense stimulus, Master," Fanzian observed. "Most interesting. Evidently we used too much power."

"But," Selda remarked, "if the only service this radiation can perform is to cause extreme growth, of what avail is it to us? It might be useful for improving crops—but that is about its limit. Apparently it enlarges the atomic orbits in matter and therefore the object becomes bigger whilst its actual mass remains unchanged."

"I fancy," Kasmus said, "that you are expecting miracles much too soon, Selda! So far we have only made one test, and even that has revealed this radiation's extraordinary properties. Let us see what happens on less power."

He altered the controls and output balancers, then again switched on. This time the radiation was cut in power by some twenty-five per cent—and in consequence the plant within its influence wilted slowly and finally dropped into ashy dust.

"I fancy, Master, that at the moment we are only on the borders of discovery," Fanzian observed, musing. "Too much radiation produces stimulation: too little kills. Somewhere between may lie just the right amount of power to produce eternal life. Which places the matter entirely in the mathematical field determining energy-

quotient and its application to a given quantity of atomic aggregates."

"Quite," Kasmus agreed. "And that problem is assigned to you, my friend. You may have all the mechanical help you need, and I too will help you. We definitely have a radiation here which has never been known within our knowledge. It may take a very long time to determine what it can really do."

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When Kasmus had assumed that it might take a "very long time" to determine the powers of the mysterious radiation he had almost been guilty of an understatement. For, testing and re-testing, checking and re-checking mazes of figures it was years before anything coherent emerged from the combined efforts of Kasmus, Fanzian, Selda, and Mazro. Just how deep was the task they were engaged upon none of the populace knew, Kasmus adopting his usual policy of not saying anything until he was sure of his ground.

Eventually he convened a special meeting of all scientists of the race, and as many of the general populace as could be accommodated, in the great Hall of Science in the centre of the city.

From an early hour on the day of convention the great hall droned with the sound of the eager voices as they rose up to the huge vaulted roof with its vitriex-filter glass which served to draw the maximum efficiency of life-giving power from the sun. As yet, age being still the greatest enemy, the men who had come to this new planet—home—needed every possible means of stimulating what life they still possessed.

Tier upon tier, fifty of them in all, were filled with the men from Nalofix—immense, reptilian creatures, yet all of them with superb brains. Then every faceted eye

turned towards the shining metal floor space in front of the central rostrum as Kasmus appeared. This was a ceremonial occasion, and he was accompanied by his retinue. A solemn hush of respect fell as the Master walked to the rostrum and took his place. To either side of him settled Selda and Mazro—and, to the rear, Fanzian.

Kasmus glanced over the assembly and inclined his scaly head slightly as the murmur of salutations reached him, then he stood up and raised a claw for silence. Adjusting the microphone before him he spoke, his voice returning in a booming echo from concealed loud-speakers.

"Fellow scientists, I asked you to assemble here to-day for a very definite purpose: to behold the most recent triumph of our science. As you know, ever since we arrived here from our doomed world of Nalofix, I have despaired at there being no way to prevent ourselves growing old. But now there is a way, and to find it has been a singularly complicated task. You observe behind me here, against the wall, a bank of machines. They have been specially transported from my own laboratory so that all of you may see what is to happen. Had I performed my experiment in my own research quarters there would not have been room enough for all of you to be present.

"This machine generates a particular order of cosmic waves, the types of waves which are only produced when a supernova explodes in outer space. You are all aware that such an explosion was artificially created, and the resultant radiations from it partly trapped. The wavelength of the mystery-radiation is the shortest in scientific records and extremely difficult to control. Too much brings super-stimulation, and too little brings death, but one particular electron-voltage arrests ketabolism completely, and that means eternal life!"

Kasmus waited for the murmurings to subside and then continued: "It has been definitely proven now that

this certain energy in a certain quantity destroys senility and is harmless to living flesh. Within the spheres there" — he indicated two gigantic metal globes on pillars—"highly energised blocks of metal will be disintegrated into free energy, producing almost the same effect in miniature as a supernova explosion. A similar wavelength is produced—that much we have discovered. All of which work is the outcome of research by myself, Selda, and Mazro, with Fanzian computing the mathematics."

The three named ones bowed their scaly heads and waited.

"I shall place myself between the two spheres," Kasmus continued, "so as to be absolutely in line with the invisible radiation which will stream from one to the other. Earthing and neutralising devices clamped to my feet and thence directed to insulating machinery will save me from being blasted into infinity and will instead allow my body to become charged with cosmic radiation, arresting for all time any chance of senility. If it is successful, my friends, and there is no reason why it should not be, then I will have unlocked the gates of eternity! Each one of us, in turn, will undergo the same treatment and we shall never again have death to haunt our endeavours."

"You have courage Master, to make this attempt," Mazro murmured, and Kasmus turned to him.

"Courage? It is not a question of courage, Mazro, when the machinery has been tested and proven accurate. Let the experiment proceed."

The assembled scientists became intent, every eye fixed on the Master as he calmly stepped into the area between the two immense generating globes. In absorbed silence the audience watched heavily insulated clamps being fastened about his scaly ankles, the covered earthing-cables leading back to the complex neutralising plant. With confident patience Kasmus waited, then at

last he raised his talon in a signal for the experiment to commence.

The safety lights in the roof, burning night and day, suddenly dimmed at the terrific drain on the city's power resources. Incalculable volts of electrical energy were created by suddenly whining dynamos, rising up from a low and steady hum to a shrieking din. Electrodes protruding from each of the massive spheres gathered the power unto themselves. Strange, gas-filled tubes connected to them began to writhe internally with brilliant lavender-tinted light.

Mazro shouted a question and the ruler nodded. In response Mazro threw in a huge four-pole switch on the complex control panel. All the disordered rioting of electricity suddenly assumed an understandable meaning. The seething electronic power fast disintegrating the metals within the spheres rose to an absolute pitch and brought about the annihilation of matter. The squirming of electricity in the glass tubes became floods of unbearably brilliant flame, hurtling their power into the electrodes.

The assembly watched, stupefied, then suddenly sprang to their feet in concern for their ruler as there streamed from the electrodes great streamers of mauve flame—electrical energy that twisted and crackled with the savagery of untamed lightning. Between the streamers Kasmus stood undisturbed, his scaly body painted by flickering purple and blackest shadow. Only the raising of his arm revealed that he was unhurt, the neutralising apparatus working perfectly to prevent his body being shattered to powder by the inconceivable power being hurled upon him.

For nearly ten minutes the amazing pyrotechnical display continued, raising the temperature of the hall by nearly twenty degrees. Then Mazro cut out the main switch, followed it up by moving the others, and the shrieking dynamos whined down the scale and became still. The tubes flickered and expired. The red-hot

electrodes turned into the blackness of fast cooling metal.

Silence came—the dead and astounded silence of a baffled multitude, broken at last by a long exhalation of relief as Kasmus raised his arms in salutation.

"Age is defeated!" he cried exultantly. "This day, we of 'Destiny,' formerly of Nalofix in the Andromeda Nebula, have overcome death! We are the masters of life and all it has to offer! Mazro, unfasten these clamps."

Selda was quicker than Mazro and obeyed the order instead. There was a curious glint in his faceted eyes even though his manner was as subservient as ever.

"My lord feels none the worse?" he asked gently.

"Not in the slightest, my good friend. We have all done well between us—you, Mazro, and loyal Fanzian there. We have given our race a priceless heritage."

Selda nodded and his eyes strayed to Mazro's grim visage and the ugly smile on his mouth; then the Master stepped forth amidst the multitude now approaching from the tiers. Mazro moved forward slightly to Selda's side, out of earshot of Fanzian.

"Eternal life," Mazro murmured. "I wonder!"

CHAPTER FIVE

Mazro prepared to move on and join the Master amidst the throngs in the main body of the hall, then he paused as Selda caught his arm. The adviser's face was bitter.

"The experiment has been a success, Mazro," he said. "I thought you said you had arranged it so that it would destroy Kasmus? Instead you've given him eternal life which means we can never kill him now!"

Mazro glanced about him, making sure that Fanzian had drifted away.

"You'd be wiser, my friend, if you did not talk so loudly," Mazro snapped. "If talk like that were ever overheard you know what would happen. We are not eternal yet, even if the Master is."

"Why didn't you kill him?" Selda's voice was a harsh, insistent whisper. "It would have been so easy. One slip of the electrodes——! You promised that you would kill him."

"I have," Mazro replied calmly.

"Stop talking like a fool! It's perfectly obvious that he is very much alive——"

"At the moment, but never was a man so surely doomed. Never was a ruler so utterly deposed without knowing it. Never did power pass so easily from a superior to an underling."

"I don't understand you, Mazro. How can——"

"You'll see in good time, my friend. I have kept my word. The thing we have awaited so long is at last within our grasp. Just leave everything to me."

With that Mazro turned and joined the jubilant ruler, leaving Selda to follow him, profound doubt on his hideous features. He was a man who believed only what he saw, and at the moment the vision of the victorious Kasmus was nearly too much for him—and it was a vision which remained in the passing days.

The normal course of science proceeded on the planet now the great experiment was over. It was left to Kasmus to decide who should be the next to be made eternal. Meanwhile the two dominant cities of the planet — a new one having been constructed at the Martian antipodes to cater for the ever-growing population—continued to throb with scientific activity.

During these succeeding days Selda kept inquiring as to his Master's welfare, and his mood became the blacker upon discovering that Kasmus was in perfect health, pursuing with more earnestness than ever his experiments with intra-atomic science, the last state of Nature which baffled his mighty brain. Indeed, far from seeming ill, he was so satisfied with his condition that he gave the order for all the members of his race to be treated with the cosmic-energy machine at the earliest moment, a decision which Selda accepted calmly and then passed on to Mazro.

"It can't be done yet," Mazro insisted. "Think up an excuse to stop him making that order final."

"Can't be done?" Selda demanded, amazed. "Why not? That is just what we want!"

"Listen to me, my friend. Kasmus is a doomed man, though he doesn't know it yet. I arranged the radiations on the cosmic-ray machine in a certain pattern, and it will take me many weeks to determine the necessary mathematics to get it back to normal, when it will really give immortality. As it stands at present it will not. Is that clear?"

"Not entirely. However, I'll see what I can do with the Master."

So, though he scarcely understood Mazro's machinations, Selda went to work to dissuade the Master from his decision.

"But why should we postpone such a benefit?" Kasmus demanded. "I don't understand your attitude at all, Selda."

"I am your adviser, Master, and merely making a humble suggestion," Selda murmured. "You, Master, are our ruler—and as such the only one really entitled to immortality. A thing of value is only such because of its rarity. Make us all immortal and we lose the greatness of our achievement."

"Which seems to me an odd viewpoint," Kasmus reflected. "Immortality was created for the good of the race at large. You will proceed with the orders."

Selda started. "But, Master——"

"What is the matter with you, Selda? Do as you are told!"

Selda bowed. "As you wish, Master." Then he changed the subject quickly before Kasmus could pursue it further. "Might I enquire how the intra-atomic investigation is proceeding?"

"Favourably. But we are up against enormous difficulties. In constructing the apparatus for viewing the atomic universe one has to work with more than normal care. Obviously, the only way to accomplish the feat of rendering the microcosm viewable is by vibration. Every atom in the microcosm emits vibrations of force, which in turn have to be amplified much the same as we now amplify a tiny sound to world-wide range. Yes, there are difficulties, but I'm sure we'll overcome them."

Selda looked thoughtfully over the accumulation of instruments.

"The final details still elude me," Kasmus continued, musing. "The very act of trapping the microcosmic vibrations creates strange and unpredictable electronic

changes. It is, I think, caused by the vibrations emanating from the amplifying machinery itself. The slightest pressure, the least movement, even the pressure of a weak beam of light, produces the most unexpected results. I am now working on the principle of absolute dark and absolute steadiness. Another few weeks will see success. Then, my friend, we shall have solved the ultimate riddle of matter. The secrets of the infinitely small! We know the Universe around us is almost empty, but are the worlds that teem around us in invisibility also empty?"

"Only the machinery can reveal that," Selda replied. "And now, Master, if I have your permission to withdraw, I will put your orders into effect!"

Kasmus nodded and returned to his work. Selda gave him a worried glance and then departed, after which he wasted no time in contacting Mazro again.

"The order goes through," Selda announced. "I cannot find a way to dissuade him—nor, as far as I can see, is his death any nearer!"

"Have patience," Mazro responded. "In the meantime that order of his must be stopped somehow."

"But I can't! I've got to transmit it."

"Yes, yes, I know—but there may be another way. The cosmic-energy machine must break down. You know its construction almost as well as I do. Burn out a series of wires—do anything you like, as long as you produce a natural accident. We must delay things until I have worked out the correct mathematical sequence for giving genuine immortality—and in any case I want to see the reaction on Kasmus before anything further is done with that equipment."

"I'll do what I can," Selda promised. "And sometimes I wonder if you really do know what you are doing."

"I am working purely to the laws of science," Mazro answered coldly, "and they just cannot be wrong."

That Selda had his doubts was obvious from his

expression, but he did not say any more. He departed, transmitted the Master's order over the radio as he had been instructed to do, and then he chose the right moment to destroy a vital part of the cosmic-energy machine. He did it so thoroughly that it would take weeks to make a repair. This done he continued his normal duties and, to his growing satisfaction, he discovered as the days went by that Kasmus was no longer so convinced that he was in good health. Indeed, far from it. As he spent his time perfecting the final details of his amazing atomic-penetrator apparatus he was clearly a sufferer from some strange, inexplicable ailment.

For the first three days of the disease's onset he refused rigidly to pay attention to it, mastering increasing pain with a set face and firm mouth, wrestling steadily with his scientific problems. Selda was ever at his side, outwardly concerned and inwardly jubilant.

"Master," he said finally, "I feel that you should take a rest. You are obviously unwell and unable to proceed."

Kasmus smiled twistedly. "It is nothing—cannot be. For hundreds of cycles ill-health has been unknown amongst us. I am eternal, so how can I possibly be unwell?"

"Perhaps—perhaps the experiment of making you eternal has had some kind of unexpected reaction?"

"No, Selda. That cannot be it. The thing is absurd! Maybe I have not been receiving my full quota of solar radiations, have been working too long in this laboratory. I will be all right. I cannot afford to slacken my efforts now. Within the next twelve hours this apparatus of mine will be complete, and we shall view the atomic universe which teems around us."

Selda did not speak. He returned to his work, thinking many things to himself.

Resolutely, through the required twelve hours, Kasmus struggled against his unknown ailment, refusing all the help Selda offered, ordering away all assistant scien-

tists who insisted he should submit himself to examination. Just the same, his constant assertion that he was quite well carried less and less conviction as time went on. His scales were drooping for one thing—a sure sign of bad physical condition. His breath too came in the sharp gasps of one trying to master pain.

Selda made no observations. He merely watched, a grim smile twisting his heavy lips—taking care none the less that Kasmus never saw his silent satisfaction.

Ultimately, the intra-atomic instruments were completed and Selda awaited further orders. Kasmus moved a weak talon. "Summon—summon the leaders," he ordered huskily. "There is no time for all to assemble. Something is wrong with me, Selda—desperately wrong."

"If there is any way in which I can help you, Master——"

"No—no, not now. Summon everybody quickly, for I——"

Kasmus stopped, staggered a pace, then clutched tightly to the huge control board. He hung onto it for a second or two, then his grip gave way, and he crashed to the metal floor and lay still.

Only for a moment did Selda stand looking down upon him, his faceted eyes gleaming; then he lifted the ruler in his powerful arms and laid him on the long metal table against the wall. Turning, he snatched up the vibration communicator and summoned the leading medical and biological minds.

Within a few minutes the experts were present. Selda stood to one side as they examined the ruler with their complicated instruments, watching keenly every little reaction of the gauges and testing meters.

At length Anyas, the chief biologist, looked up. His expression was one of profound bewilderment. "Whatever it is which has overcome our beloved master it is something beyond our knowledge," he muttered. "He is not dead, but neither is he alive. The only course is

for him to retire to his chamber, there to be watched and guarded until there is some development that will give us a clue."

Selda nodded and summoned two robot machines standing by him. With gentle metal arms they lifted the unconscious ruler and bore him out of the laboratory, laying him down at last on his own cushioned air-bed within his immense private chamber. As they performed the action Kasmus stirred for a moment, and his huge eyes settled on Selda's impassive face.

"Selda—the machinery," he whispered. "If—if anything should happen to me you must—demonstrate it. You—you take command. But—show the machine——"

"Later, Master," Selda replied quietly. "You will soon be with us again. It is your achievement, even though I understand how it operates. I am not worthy to set in motion the creation of your mind."

Kasmus did not reply. His eyes closed again, and he relaxed gently. The assembled experts made motions amongst themselves, arranged about the bed the necessary automatic machinery that would attend to the stricken ruler's every need during their absence. Then, satisfied that they had done all in their power they darkened the room and departed, Selda following silently in their wake.

In the corridor Anyas turned to the advisor questioningly: "This machinery of which the Master speaks—what is it?"

"A revolution in atomic sciences, Anyas. With its aid the atomic universes can be seen, the worlds within them becoming plainly visible. Our beloved master has laboured long to achieve perfection in that direction. He was fortunate in that he defeated illness long enough to finish his task. The machine waits—either for him, or for me."

"You mean?"

"If—which the cosmos forbid!—the Master should

pass from us, I shall rule in his stead. He made that fact perfectly clear in the hearing of all of us."

Anyas did not reply. He had no liking for the quiet, sinister Selda. Without another word he went on his way, his puzzled fellow-specialists around him.

Meanwhile, Kasmus, lying on his bed, was in a physical condition that utterly baffled his trained and resourceful brain, matured as it was through long decades to face any problem and solve it almost immediately.

His condition was paradoxical in that his brain was unaffected. He was crystal-clear in perception — had never been clearer. The trouble lay in his body. It utterly refused to respond to his will, was seized in some ironily immovable paralysis which all his strength of mentality failed to break. So far as he could determine his body energy was undergoing some strange and subtle change, was in the grip of something outside his own normal energy which had plunged him into a blur of pain.

Even to open his eyes was an enormous effort. He beheld only the darkened bed-chamber. The slightly parted curtains revealed the night through the window. With a tremendous effort Kasmus forced his eyes downward to look at himself. Had he not been so paralysed he would have started with amazement. His body, which was bathed in lambent blue fire, lay in an aura of phosphorescence! Energy? Electricity? Chemical activity? Kasmus's mind postulated all three possibilities and came up against a blank wall. He did not know. Besides, this effort of keeping his eyelids open— He closed them wearily and relaxed.

Not ten minutes afterwards the door of the room opened very softly, so softly that the pain-deadened ruler failed to hear it. The grim face of Mazro obtruded into the opening, painted with the glowing fire from the Master's body. Mazro nodded slowly to himself and then retired, afterwards hurrying through the long, airy pas-

sages to the private domain of Selda. He found him seated at his desk, head sunken on his scaly paws in musing thought.

"Selda, come quickly! See for yourself——" Mazro stopped to regain his breath, his face triumphant. "You have asked long enough for results. Now you shall see them!"

Selda got hurriedly to his feet. "You mean the Master is dead at last?"

"Not yet. He is apparently on fire. Bathed in blue light. Things are working out exactly as I hoped they would. Hurry, man, this is well worth looking at."

"Bathed in blue light?" Selda repeated vaguely.

"As blue as an energy tube—which, since energy is responsible, is not surprising."

"What have you done? Surely you can tell me? It would be of far more interest than seeing the Master himself."

Mazro hesitated for a moment and then shrugged.

"Very well, if you require the details. If the Universe were suddenly flooded with energy from an external source, from some supra-universe, what do you imagine would happen?"

"Presumably the Universe would be destroyed."

"Ordinarily, yes. But suppose there came into it an energy of the exact type needed to create life instead of destroy matter? Would not every piece of matter in the Universe, every planet, every satellite, even every star, momentarily increase its energy as it absorbed the sudden influx? Naturally it would—and in the process it is also quite possible that the Universe itself would turn blue with electrical energy. That, my friend, is a simile of what is happening to our—er—beloved ruler!"

Selda stared stupidly, unable to fully understand the theory Mazro had outlined. "How can it?" he demanded at length.

"Because inside of Kasmus, inside you, inside me—

inside every being on this world or any other world, even inside the worlds themselves are universes. Molecules, if you prefer—universes of the infinite small, but just the same—universes!"

"That is simple science, Mazro. Do you take me for a learner?"

"Candidly, yes," Mazro replied cynically. "Every scientist on this planet, even Kasmus himself, missed the main issue when this life-eternal system was promoted. Kasmus certainly could not create life out of inert chemicals: he admitted that much. But he could stop death. That also was quite true. What he forgot was that, by allowing himself to be bathed in that cosmic energy he gave life to living worlds inside his own body! They were not inert chemicals, such as those we tried to stir into life. They were electrons, worlds in miniature, all packed within the atoms and molecules comprising Kasmus's body. Very well, then—when he supplied cosmic energy and allowed it to surge through his body he gave to those electrons the energy of life, spawned upon them maybe living beings, beings of the microcosm.

"Maybe it only happened to one electron—one world: maybe it happened to thousands. We don't know. It all depends upon the different states of the worlds concerned. What we do know is that Kasmus has probably brought life to worlds within himself, and in so doing has replaced his own bodily energy with cosmic energy, the full balance of which has taken some little time to show. Now it has come it will inevitably mean his death."

"Why?"

"The people will demand it, my friend, in their own interests. You'll see."

"I'm afraid I don't, Mazro. The people will never seek the death of the Master."

"No? Events will show. I have already prepared the people for a change of rulership—and there are reasons

why Kasmus must not be allowed to remain amongst us. Believe me, now my plan has worked out, it is a good one. And I would warn you to keep as far away from Kasmus as you possibly can. Better still, I will have the robots erect an insulated screen around him. Then we must summon the biologists and leading scientists. It is essential they see Kasmus in his present condition."

Mazro turned and strode to the vibration communicator upon the wall.

CHAPTER SIX

By dawn every important member of the scientific council had been summoned and stood in an interested but puzzled group around the gently glowing ruler. But between him and themselves there now reposed a heavily insulated transparent screen, erected by the robots.

Quietly, in tones of most abject despair, Selda made clear the nature of the Master's ailment, giving it purely as a theory—as he had been ordered to do by Mazro. He was not surprised at the storm of protest which greeted him.

"Life within life!" cried Anyas, the chief biologist. "I refuse to credit it, Selda!"

"Even though you admit we are made up of micro-cosmic universes?" Selda asked calmly.

"Even so! We failed to produce life in inert chemical by the cosmic energy—Kasmus told us that: how, then, was it allowed to happen to our ruler? Is he not inert chemical just the same? Composed of electrons which are precisely identical to those in the inert material we tried to enliven?"

"No, Anyas, he is not. It surprises me that a biologist of your undoubted eminence should even think so! Between molecules in a state of life such as those within a living being, and those in an inert chemical aggregate there is an infinite difference. Pressures are different; temperatures are different, and most of all, they are

within a living being, which imparts something of life to the electrons of his material body. When he let that cosmic energy surge through him he produced the identical effect that happened to this universe when a similar surge must have spread through it from a supra-universal source, begetting such life as ours. Inside of himself he has repeated creation, and in the doing has lost his own life-energy and replaced it with infinitely stronger cosmical energy."

"Then—" Anyas did not say any more. He was plainly trying to grapple with the issue.

"I will endeavour to prove it to you," Selda added quickly, and turned to the ever-attentive robots. "The robots will transport our master's body into the laboratory within his insulated case. It is purely a precaution against possible dangerous energy emanations proceedings from him which may affect us. In the laboratory we can learn, by the use of the atomic machine which he himself constructed, whether my theory is correct. You agree?"

There was a slow nodding of the scaly heads and Selda smiled to himself. None of his present actions was of his own initiative. He was acting solely on the orders of the unscrupulous Mazro who, not being an advisor, was in no position to control matters as Selda was, even though he was present at the moment amongst the scientists.

Selda gave a signal, and stood aside as the robots lifted the ruler and bore his screened case from the chamber, ultimately laying him down, under the adviser's directions, beneath the focus of the enormous atomic-projector. Once this was done Selda switched on the ceiling lights and indicated the masses of complicated machinery. Here he could speak for himself since he knew the lay-out perfectly.

"Only the Master, Mazro, and myself know the process of this equipment," he said, glancing about him. "That being so forgive me if I merely explain that it

is based on the principle of every atom emitting vibration which can be transformed, by devious methods, into a pictorial version of the object originally emitting the vibration. Just as our super-reflectors reach out to the ends of the stellar universe and pick up the weak light vibrations of the furthest stars, passing them through transformers and reproducing them by amplification into a clear-cut picture of the original, so here we do the same with atoms and the electrons within them. The result is projected on to the screen which you see immediately above you," and Selda nodded to the twelve-foot-square receptor near at hand, its surface at the moment composed of a metal as black as space itself.

The assembled scientists did not pass any comment but they waited interestedly, trying as best they could to disguise their dislike for the sinister adviser.

The laboratory suddenly became dark again. Metal shutters closed over the windows and blotted out the dawn light. The only glow in the whole place came from the recumbent ruler's body. A creaking came out of the silence as the insulated lid of his oblong coffin was slid aside by a robot; then Selda crossed to the control-panel which he had reason to understand so well.

A spotlight sprang into being. For a split second sparks flashed from the contact of a master switch-blade. Simultaneously the familiar hum of dynamos spread through the quiet. Vacuum-tubes glowed silently into life. Violet light sprayed from enormous condensers and transformers.

Little by little the noise increased; the surgings of power were stepped up until, at last, the entire laboratory was bathed in glowing mauve flame, leaving the unmoving ruler as a solitary figure in the direct path of the projection machine. At last there stabbed from its lens a carved, ivory-white pencil of blinding, heatless brilliance, striking his supine body and passing

clean through it into the floor, then down again into seemingly dimensionless depths.

The scientists watched in utter silence. Selda stared fixedly, a strange, lavender-painted scaly figure before the switchboard, his massive talons flashing up and down the complicated controls. There came a sudden deeper throbbing, an even greater mad crackling of incalculable power—then the broad screen changed from its jet neutrality to a delicate salmon-pink. It deepened to scarlet; then by imperceptible degrees merged gradually towards violet, radiating a most bewildering but indescribable array of colours in the process.

"Look!" Anyas whispered, pointing. "In the name of the cosmos, look!"

His colleagues did not need to be told: they were already gazing in amazement at the portion of their Master's body revealed on the screen. Only for an instant was there visible the strange skeletal formation of his chest and ribs—a perfectly produced X-ray impression—then this changed and merged into a composite haze as the bones themselves were penetrated, the great central breastbone becoming gradually wider until it filled all the screen. From this point onwards the amazing penetration went through all the composition of the bone, revealing, with a clarity never known before, its actual constitution, laying bare the phosphate, carbonate, flouride of lime and other materials, which in turn passed into a common blur in which there was nothing understandable.

Once this point was passed the violet glow vanished and was replaced by blackness. For what seemed an interminable length of time there was nothing visible—then, slowly, there merged into view tiny points of light, incredibly small galaxies of stars, suns identical on a small scale to those in the huge external universe.

"Now watch!" Selda exclaimed tensely, and stepped up the amplifiers to even greater power.

The laboratory became sickly with heat; the air reeked

of hot oil and hung heavy with misty exhausts. The metal floor quaked to the vibration of the thundering engines. Only the atomic mechanism itself remained steady, all traces of vibration overcome by Kasmus's final accomplishments. The light-tight reproducing chamber was functioning perfectly.

The smallness of the microcosmic galaxies increased at a tremendous pace, leaping from mere dusty hazes to enormous agglomerations of countless suns and nebulae, rotating slowly in empty space.

This is but one molecule within the body of our beloved ruler," Selda explained, his voice hardly audible amidst the din. "Think of it, my friends—one molecule! Therefore, inside him there are untold millions of universes, each one of which has probably been imbued with life-force. One universe is enough for our purposes, however. If he has indeed created life it will be as evident in this one as in any of the others. Let us observe."

More switches clicked under Selda's claws. In the screen there appeared a perfect solar system. Even as it swept into view the brilliant bluish-white sun changed to yellow and sank down to red. By the time the view was clear the sun had expired entirely. Irritably, Selda changed his switches again and presently located another solar system. Here again the sun was slowly fading from white to golden-yellow, but its deterioration was less swift than the preceding one.

"Why the change?" asked Anyas.

"Time," Selda answered briefly. "Time in the microcosmic universe moves with infinitely greater speed than our own. Remember that a thousand million years on an electron is but one millionth of a second here! The sun of this particular microcosmic system is of vast size and therefore takes longer to expire. Even now, though, it is dying. Even as we gaze, life on one of those electronic worlds has pursued its course from prehistoric days to the end of civilisation. Surely on one of them there might be life——?"

Selda stopped dead, jolted with sudden amazement. The scientists moved nearer as the view steadied and stared down on the largest of the group of seven planets. Six of them were deserted, but on this major one there was something distinctly bright and gleaming spread upon the surface; the outlines of a city couched deeply within the towering mountains of a rugged, friendless landscape. Even as they stared the city began to crumble with age.

"Intelligent life!" cried Anyas. "The work of thinking creatures! Selda, you were right! This proves it to us——"

He broke off, gazing intently as there suddenly leapt upward from that strangely beautiful city a gleaming, silvery machine, plunging outwards from the slowly dying world into the depths of electronic space.

"Space travel!" Selda exclaimed. "They are escaping from their world, doomed by eternal cold. See, already time is moving so swiftly that their planet is caked in ice—and yet the space machine is becoming larger, must be covering intra-atomic space at a terrific velocity. Larger—larger——"

Selda's voice died away in amazement as the machine began to swallow up the entire cosmos, filling the screen with an all-over greyness.

Suddenly the truth dawned upon him and he shouted huskily.

"Those people are travelling to the end of their universe—intend to burst through it into the super-universe. Our universe! Quickly! Stand back! There may be an explosion——"

He immediately deserted the switch-panel, blundered amongst his colleagues, then went backwards with them to the far wall. With startled eyes they all watched the screen. It was an impalpable, swirling sea of grey. The engines continued to thunder their song of power——

Then, from the body of the silent Kasmus, there was a flash of unbearable brilliant light and a sharp report.

Nothing more. The scientists advanced again cautiously towards the insulated case. The Master was unharmed save for a slight wound in his chest from which there trickled a steady flow of brown blood.

"Lights!" Selda shouted to the robots. "Hurry!"

He went over to the control-panel again and pulled out the switches, listening whilst the dynamoe sang down the scale and became quiet. Even as they did so light came into the laboratory—not from the bulbs, but from the windows as the robots threw back the shutters to admit the daylight.

"Look!" Anyas muttered, standing with the others around the case.

Selda and Mazro moved to the biologist's side and peered within the oblong. In the strong daylight the bluish glow from Kasmus had almost disappeared. But it was not this which concerned the scientists: their eyes were fixed on something they could scarcely believe—the sight of a microscopically small object of bright metal, a machine of infinitesimal proportions tapered at both ends, now lying on the soft air-bed on which the Master lay unconscious.

"What—what is it?" Selda demanded finally, staring over Mazro's shoulder.

"A machine out of the microcosm," Mazro responded. "Those beings we saw leaving their world—but instead of seeking another one in their own universe they took a far greater chance and decided to burst the bounds of their universe and gain the supra-universe—ours. They succeeded. It has done little to the Master beyond create a wound which can easily be healed—but it has brought to us life from a world within him, a life originally created by his cosmic-energy experiment."

"Perhaps you will now believe my theory?" Selda demanded, looking arrogantly about him.

The assembly nodded quickly.

"Will not others come?" Anyas questioned. "Of all

the teeming universes within the Master there is surely the possibility——”

“Certainly there is,” Selda agreed. “But for the time being we will be satisfied with what we have.”

“If there are creatures inside this tiny machine why don’t they appear?”

“We’ll soon find out,” Selda answered, and turning to the robots he issued instructions.

Gently they lifted the tiny machine out of the case and placed it on a nearby bench. With further quick movements they applied healing ointments to the ruler’s wound, curing it instantly, then they slid the case lid back into place.

“The growth enlarger—an offshoot of the cosmic-energy apparatus — ought to resolve our difficulty,” Selda decided.

Accordingly the minute vessel was moved into an adjoining section of the laboratory, placed in the centre of the floor, and then flooded with radiation which rapidly widened the electronic orbits of the ship and its contents until it stood a hundred feet high and three hundred feet long. Only then did Selda switch off the apparatus and wait expectantly.

Presently the massive airlock of the vessel was unscrewed from within, swinging aside in the grip of some form of magnetism. Through the opening their appeared men and women, so strange and bizarre that the men of Nalofix could only gaze fixedly.

White skinned people without scales! Possessing two legs and two arms, these latter ending in five-fingered hands. For some reason the Nalofixian scientists could not fathom, the heads of these beings were not bald but covered with peculiar fluffy substance, dark in some cases and fair in others — some long, some short. The eyes were the most remarkable—of various colours from black to blue or grey, and not one of them had facets! How revolting!

In absolute silence Selda and his contemporaries

watched the people file out into the great laboratory. Selda counted three hundred of them of all shapes and sizes, some clearly females if their lesser size and more rounded development was any guide. Nor were any of them naked. They wore one-piece garments of a strange substance with a brightly gleaming belt about the middle. In size they were diminutive. Not one of them more than six feet in height. Selda drew himself up, proud of his eight feet, and towered over the high-foreheaded little being who was obviously the leader of the party.

"Who are you?" Selda demanded, in his own language.

The little man shook his head and replied in an unknown tongue. Selda frowned and glanced at his colleagues.

"Obviously language difficulty," he growled; then he motioned the strangers back into the main laboratory. Once in here he prepared to place them all in the range of a brain-tutoring machine when, to his surprise, the leader spoke fluently in the tongue of Nalofix. In amazement Selda turned to gaze at him and met a pair of inscrutable, calm black eyes.

"I am sorry, my friend," the stranger apologised, "that I did not answer you immediately. It took us some little time to assemble your particular language into understandable form. I am Razak, formerly ruler of the planet Disep. But I see you know already of the fate that threatened our home world. We realised that ultimately our planet would die and, knowing also that no other worlds in our universe were suitable for our purpose, we decided to come from the microcosm to here.

"By some chance it appears that our world was within your ruler, Kasmus of Nalofix. I trust, my friends, that we have your hospitality? Here are my people and their children, a chosen few—indeed the only ones who were willing to take the chance of breaking into the supra-universe."

With an effort Selda found his voice. "Of course you are welcome to stay here until you put your affairs in order. Tell us, though, how you managed to defeat time in crossing from your universe to this one?"

Razak shrugged. "Suspended animation, of which you already know. It set time at zero as far as we were concerned. Our awakening was perfectly timed because we knew you would find us."

"Knew?"

"Certainly. There are no secrets in time or space if you but understand them."

Selda frowned a little. "You understand, of course, that you may only remain on this planet until you discover whereon to continue your activities? We of this world have no room for permanent aliens like yourselves."

"At least you display the lack of courtesy common to a true scientist," Razak commented dryly. "It may perhaps interest you to know that we of Disep are intellectuals. We reached your clumsy machinery-era ages ago. By the time our world was dying we had become the monsters of everything scientific. Our last achievement was the construction of the machine which brought us from intra-atomic space."

"I understand," Selda murmured, his great eyes never leaving the stranger's face.

"I further gather from your mind that your ruler was responsible for our being alive, by use of his cosmic-energy system. You realise, of course, that he is a deadly being to have on this planet of yours?"

"Is it any concern of yours?" Selda demanded.

"In a way it is," Razak replied calmly. "You see, I happen to know that your main object in allowing your ruler to use cosmic rays was so that he would ultimately be deposed and allow you to rule in his stead. You and Mazro worked that out between you."

Selda exchanged a swift look with Mazro and then glanced about him on the grim faces of his colleagues.

"Lies!" Mazro declared flatly. "Nothing but lies and very unconvincing thought reading!"

Selda nodded and moved forward slowly—then he suddenly shot out his immense claw and grasped the imperturbable Razak by his slender throat.

"So, my friend, you read thoughts?" Selda murmured gently. "Have a care to read them properly! You burst into our universe, and the first thing you do is try and poison the minds of my colleagues against me! I do not like people like you, Razak, and those whom I do not like I destroy! I was prepared to be tolerant until you had straightened yourselves out—as it is I have no alternative but to imprison you until it is decided what shall be done with you. Maybe we'll set you to work. In any event you will learn that, intellectual or otherwise, it does not pay to insult your hosts."

Razak merely shrugged again as his throat was released.

"I am speaking the truth, Selda. Imprison all of us if you wish. It does not matter."

"Not matter?" Selda repeated suspiciously.

The little ruler did not explain himself further. Inwardly fuming, Selda turned to the robots and gave swift orders. Then he watched grimly as the entire party of men, women and children were herded uncereemoniously from the laboratory to the regions of the prisons below the city itself.

As he reached the doorway Razak looked back. "Remember, my friends, that your ruler is a menace to all living beings as long as he remains on this planet! The life-energy he has within him will communicate itself to other living beings once that screen around him is removed! He is neither dead nor alive, and will remain in that state until the cosmical life energy within him expends itself after untold centuries. Fire him away into space from this planet! Never allow him to touch anything that lives! Never allow him to make contact with this or any other planet again! Though he himself

will die the instant he reaches space the energy within him will live on, being itself part of the cosmos."

"Are you daring me to give orders?" Selda demanded angrily.

"I am merely warning you. Do not forget that recently you were near to him when the lid of his insulating case had been removed. So was your companion Mazro, as well as some of the others."

"Well?" Selda snapped, though there was a hint of fear in his voice.

"That is all. You will learn more later. It is a pity your hospitality is so bad: you have much to learn yet of the ways of Razak of Disep!"

With that the strange individual turned and, with dignified tread, followed his people, leaving Selda and his colleagues staring dubiously after him.

CHAPTER SEVEN

Though Selda tried very hard to reassure himself that Razak's bald statements were merely empty vapourings, he could not entirely shake off the grim conviction of dread within him, a feeling that the strange little being from the microcosm knew exactly what he was talking about.

Mazro was frankly troubled, and admitted it. Anyas was profoundly suspicious. Razaks' accusation had not fallen on stony ground. Coupled with a natural dislike for Selda—and the puzzle of the strange malady of the Master—the biologist was inclined to believe that the intellectual from Disep knew precisely what was in the traitorous Selda's mind.

What Razak had meant by imprisonment meaning nothing to him, had not so far become evident. He and his companions languished deep in the bowels of the equatorial city within a steel lined cell, permitted only just enough air. Machines took food once, and it was promptly refused.

The night following the strange events in the laboratory Selda found himself visited by Mazro, nor was he looking particularly sure of himself.

"I had to speak with you, Selda," he said worriedly. "I could not compose myself during the rest-period. I want to talk. Do you think the people suspect us?"

"Certainly not!" Selda's accession to the place of the Kasmus had completely destroyed the last suggestion of subservience. "Why should they? I have taken over control, as Kasmus ordered that I should, and I am prepared to have you work at my side. Our path is now entirely clear. We know that Kasmus can never recover, that the energy of life possessing him has destroyed his physical powers forever. Only his mind lives, and that too will soon die."

"You mean that you are going to take Razak's advice and fire the Master into space?"

"I am taking nobody's advice but my own. Certainly Kasmus must be fired into space, to become an isolated wanderer—otherwise he may pollute us all. I admit that Razak has borne out your theory to a certain extent—that the energy radiating from Kasmus is dangerous. Therefore he shall be sent into the void before dawn. I have decided on that."

"And will the people permit that? As adviser you have your finger on the public pulse and——"

"Permit it!" Selda interjected in scorn. "It is not a question of permission now I have become the ruler of this race! Nobody understands as much of the control of this world as I do. When I have completely taken over power I shall put many plans into operation, plans which Kasmus would never heed. We will expand—conquer—spread to the far corners of the Universe and become controllers of the microcosm also. And you, my friend, must correct that cosmic energy machine so that we can have immortality."

"Yes," Mazro agreed, thinking. "Yes, I'll do that."

"There will be no limits to what we can accomplish," Selda continued. "Razak, for instance, brought a micro-ship from the infinitely small. We will build other machines identical with it and so visit the atomic universes which surge about us. He has provided us with the one science we did not fully understand—intra-atomic travel. We have already conquered interstellar space.

Yes, it is easy! There will come a time when this world will grow old—we shall need fresh fields in which to expand our activities—we, the Eternal Ones, as we shall be. We might even move to the third world of this System——”

“With all this I am in complete agreement, Selda,” Mazro interrupted. “But I cannot help being worried. I keep thinking that we were near to Kasmus’s insulated case when the lid was open. I wonder if Kasmus’s radiations did have any effect upon us? The words of Razak are still haunting me.”

“Then dismiss them!” Selda retorted in contempt, supremely sure of himself. “Just a talkative, white-skinned fool from another world attempting to frighten us with so-called mind reading. There is nothing to fear.” He rose to his feet with sudden purpose, far more master of himself than Mazro was. “It is a good time to dispose of Kasmus’s body, whilst the others are at the rest-period. By the time they awaken Kasmus will be in space—and then I am in control, with you beside me. Come!”

Selda led the way swiftly from his chambers and down the darkened corridors of the great edifice. The quietness of the rest-period was upon everything. Without a pause Selda went into the main laboratory and, Mazro behind him, softly closed the door. Kasmus’s body was exactly where it had been during the earlier events, still emitting its blue life-energy glow.

Selda nodded in satisfaction and went on through the laboratory to the next great hall, switching on the lights. He then surveyed the colossal cannon device by which space machines were catapulted into the void for experimental purposes, afterwards achieving continuous flight by means of the enormous initial momentum provided.

“Have the machines fetch Kasmus’s body here,” Selda told Mazro. “Meanwhile I’ll prepare a projectile to receive him.”

Though it was plain Mazro did not like the reversal

of positions, whereby he took orders, he obeyed none the less. Selda turned aside and operated the vast machinery, watching in silence as mechanical arms raised one of a series of two hundred small freight projectiles from the cradles by the far wall. His faceted eyes were glinting with the light of grim pleasure as he watched the tiny ovoid swing in the wilderness of machinery then lower gently to the floor and become still.

Swiftly he unscrewed its airlock, unbolted the trailer apparatus by which it was normally fastened to a passenger space-machine, and then set the guiding controls. He was still checking the proposed route carefully on mathematical calculators when the robots appeared and laid the glowing ruler's body within its insulated case on the floor of the projectile.

Mazro waited in expectant silence as his colleague made the final adjustments to the guiding mechanism.

"Elliptical orbit?" he asked, and Selda gave a nod.

"Yes, with the sun as the approximate centre. This projectile will stay within the radius of the solar system but will never touch any actual body—therefore there is no chance of this life-energy affecting any world, be it living or dead. The orbit I have charted will bring this projectile back within this region, between this world and the third one, at intervals of seventy-six years, or thereabouts."

Mazro nodded and continued to watch as Selda screwed up the airlock and then returned to the machinery. The projectile was raised into the air again and ultimately lowered into the huge tunnel of the space-gun. With a quick movement Selda set the automatic controls and then hurried towards the door.

"The observatory!" he said quickly. "We can view for ourselves what happens. Hurry! The gun is timed to fire in seventy-seven seconds."

At top speed he and Mazro raced through the building, down the corridor that connected the laboratories with the astronomical rooms, and finally into the great

observatory. Selda slammed the door shut behind him. Even as he did so the entire chamber, the whole vast edifice, quaked with the sudden force of a tremendous explosion. The gun had released its inconceivably powerful explosive, hurtling the living-dead king into the eternal deeps of space.

Only for a moment did Selda hesitate and recover himself, then he moved to the circular area wherein lay the floor mirror of the powerful reflector. Impatiently he operated the various controls required to its management and stood gripping the rail which surrounded the mirror, watching anxiously as the huge device moved and glided gently into place upon immense gimbals, finally automatically fixing itself into position and reflecting a clear area of space.

Selda's breathing became laboured with the strain of events, Mazro beside him gazed at the screen with eager eyes. Then, suddenly, there streaked into view a brilliant ball of bluish-white light, trailing behind it in an almost detached fashion a long, fan-shaped streamer of misty luminosity, as elusive as a solar corona. Immediately the reflector responded to the light-waves received from the object and held it steady on its outward journey into space.

"Is that it?" Selda asked at length, his voice puzzled.

"Of course it is!" Mazro breathed. "The movement into space has broken up the original ship and Kasmus into vaporised, extremely tenuous gas, given visibility only by the life energy which Kasmus carried with him. That of itself is indestructible. The further that thing goes into space the longer the tail part will become, until it may spread out by common attraction to a distance of millions of miles." Mazro stopped and pondered, staring hard at the nucleus of the odd-looking object. "Already the central portion is expanding rapidly," he continued. "As it travels it will become larger—maybe as large as this world, or even greater. And every seventy-six years it will return, a silent witness to our master's endless

journey. Never again will that life energy touch any world—your calculations have seen to that."

"We have seen enough," Selda decided, and switched off. Then as he turned to leave the observatory he paused in amazement as the door quietly opened. Within it Razak of Disep stood framed, and behind him his own people, together with a tremendous number of the Nalofixian scientists, with Anyas the biologist to the forefront.

Only for an instant was Selda at a loss, then he strode forward resolutely, only to stop again as Razak commanded him to halt.

"You—you dare to order me!" Selda burst out furiously. "What are you doing here? How did you escape from the prison?"

Once again he advanced purposefully, slowly coming to a halt as his eyes met those of the little Disepian leader. Once again he read in those dark, unfathomable depths a strength of will far in excess of his own. He gazed fixedly, then with an effort he detached himself and glanced around, to find Mazro was immediately at the back of him.

Anyas pushed his way through the men in front of him and faced Selda from a distance.

"Fortunately, Selda, I placed a good deal of faith in the observations Razak made when he first arrived here," he said grimly. "It was I who released him and his people. We arrived at the precise moment of the firing of the space-gun. You have, of course, hurtled our beloved ruler into the void?"

"What else?" Selda snapped. "Would you prefer that we all be killed by the energy he was emanating? Razak himself advised such a move."

"We all know that," Anyas retorted. "For that we bear no malice: our beloved Master has been released from a living death. What we cannot forgive is the fact that you and Mazro permitted him to make the experiment knowing full well what would come of it! You did

it purposely in order to gain the mastery of this planet. I suspected it, but I had no proof. Thanks to Razak my suspicions were confirmed. A man created on a world within our ruler, who otherwise would have been unborn, has arrived to upset your entire scheme! It would have been better if you had neither of you dabbled, my friends."

Selda did not reply for the moment, but his face was set in an expression of ugly fury.

"It is time you understood, Anyas, that Selda is now the master of this planet," Mazro declared. "And nothing can alter it! And I am his right hand."

Anyas smiled crookedly. "It is not left for me to alter it," he replied, shrugging. "Suppose you and Selda look at yourselves?"

Simultaneously with the words his claw depressed the light switch, swamping the great observatory in absolute dark. With fear crawling through their vitals Selda and Mazro stared down at their bodies and then gasped sharply. They were glowing, dimly, with the first unmistakable signs of life-energy!

"You see?" Anyas asked, flicking the lights on again. "Again Razak was correct when he foretold that the open lid of the insulated case would permit fatal radiations to reach you. Gradually the incipient energy within you will grow, become a gripping paralysis, your bodies mere hulks for the living, spawning universes within you."

"Now you realise why we are keeping our distance—why Razak ordered you to halt. Had you seen yourselves in the dark before this you would have comprehended the fate in store for you. There is only one course to adopt." Anyas's voice had become grim. "In the interests of the planet you must both follow Kasmus into space!"

A stunned silence fell on the two leaders. Then Selda's air of superiority broke down completely. "No, not that! Anyas, I never really meant to do this! It was Mazro back of it all——"

"Stand exactly where you are!" Razak commanded, as the two men moved forward. "Stand perfectly still! Anyas, summon your servants to seize these two immediately."

The biologist obeyed, and only when the robots were holding the two traitors in a grip of iron did Razak relax his overpowering will. He smiled enigmatically.

"I am sorry, my friends, that my first task on this planet should be to bring to justice so traitorous a scheme—but since chance willed it that way I have no alternative but to obey." He turned and faced the assembled men of Nalofix. "I would suggest immediate dispatch of these men," he said, in his quiet, unassuming voice. "Delay will endanger all of us. Proceed at once, Anyas."

The biologist hesitated for the briefest instant, rather taken aback by the intellectual's calm order. Then he gave the necessary instructions and a clear path was made for the fighting, struggling pair as they were driven by the relentless robots to the projectile room. In silence the Nalofixians and Disepians followed at a distance in the rear. Anyas and his immediate followers got to work on the projectiles, calculating just as Selda had done not an hour earlier.

Selda became calmer as he watched. Such was his nature he became resigned once he knew he was beaten. In Mazro there was no trace of fear whatever, only a proud and insolent arrogance for those who had proved cleverer than he. He moved his contemptuous gaze away from the cowed Selda and surveyed the ticking calculators, then he looked at the small figure of Razak in the immediate foreground. The intellectual's brows were down in concentrative effort, his queer hypnotic eyes fixed on Anyas with a steady, unwavering stare. Suddenly and vividly the truth smote into Mazro's agile brain.

"Anyas!" he cried hoarsely. "Anyas! Don't you

realise that Razak is hypnotising you? You are not the master of your own will!"

The biologist and his comrades looked up sharply from the calculators. Razak's face hardened from its normal expression of assurance and became fiendishly intense. For a brief moment Anyas seemed to recover a vestige of his normal self, then he relaxed again and shrugged.

"Such accusations will not avail you anything, Mazro," he replied, and went on with his task.

Stung by the contempt with which he had been treated Mazro tried again—futilely. He pleaded, shouted, and clamoured. Be it said in his favour that he was not now thinking so much of himself as of the planet he dearly loved—the world he and Selda had both wished to make the master planet of the universe. Only his brain, not under the control of Razak's superhuman willpower, could detect the evidences of hypnotic control.

He was still fighting to the last as the robots drove him and Selda into the space projectile. Then the airlock was closed and the shoutings instantly ceased even though the two scientists were visible at the small porthole mouthing desperately. Ignoring them, Anyas fixed the controls of the cannon and then departed with Razak and his colleagues to the observatory.

In silence, Martians and Disepians alike heard the titanic report of the space-gun, saw in the reflector a bisected mass go hurtling into space, breaking into two separate balls of incandescence with sprawling tails expanding behind.

"They too will enlarge," Razak said. "As they go onward the life energy will become stronger—they will gleam more brightly. This world is now practically rid of all traces of that dangerous energy — but even yet there may be others. We of Disep have gained our end and have removed all opposition. We have indeed become masters of this planet!"

He turned slowly and faced the surprised Nalofixians. His implacable face was one of frozen hardness, eyes

bright and keen. Anyas took a sudden step back amongst his fellows, sweeping his startled, faceted eyes over the steady array of white faces, male and female, grinning with sardonic amusement. Little people, yes—weak and ineffectual, and yet their minds were deadly poison——

With an effort Anyas gasped out: "Master of this planet? What do you mean?"

"I mean that Mazro spoke the truth," Razak answered. "I did hypnotise you, but only to a good end. They deserved to die, those two—they had to die. Not only because of energy but because of the opposition they might have given me. Understand this, Anyas. I am the ruler of this planet from here on and nothing you or your people can do will alter it!"

"But—but you are only visitors!" Anyas protested. "As such you are more than welcome to stay—but such talk as yours is——"

"You should know by now, my friend, as a scientist, that the law of the Universe is survival of the fittest. We are more intelligent than you. We even forced you, mentally, to come and release us from the prison. We have no world on which to live save this one—therefore we will take it from this moment onward."

Anyas's startled eyes moved over the slowly nodding heads of the Disepian men and women. Three hundred of them, themselves almost approaching the inhuman mentality of Razak. The biologist suddenly felt utterly helpless. He even wished he still had the determined even if traitorous Mazro at his side—and Selda too. At least they had been his own skin. Instead he was faced with this white-skinned creature and his pitiless intellect.

Anyas turned slowly to look at his comrades and in their faces he read something of his own bleak despair.

Razak of Disep clung immovably to the purpose he had outlined. With effortless ease he wrested all semblance of control from the Nalofixians, even fired several more into space as they revealed unexpected traces of life energy—until at length he was apparently satisfied that the blight was completely eliminated. Anyas was promptly despatched to the twin city of the Antipodes, there to work in comparative exile.

The Disepians rapidly turned the machines and devices of the Nalofixians to their own uses and quickly mastered the planet from end to end.

Razak examined each of the surrounding planets in turn and found them impracticable for expansion. The nearest one to the sun was a blistered wilderness. The next nearest was still too young for consideration. But in the third world there lay opportunity.

Night after night Razak sat beside the vast reflector with his two scientific assistants, studying every detail of the third world.

"An empty world, young and fresh," he murmured. "A world without life, without greenery, without even the faintest spark of a living amoeba. There, my friends, there lies room for expansion. There are three hundred of us. One hundred and fifty will depart forthwith to that world and commence the generation of a race. I will go personally and direct operations. You, Vildon, will stay here and deputise for me. You will find it simple enough now these reptiles are under subjection."

Vildon inclined his head. "As you order, Razak. Clearly, within a few cycles that third world will be well populated. Our race can expand and live as never before, once the seed of life is stimulated."

Razak nodded slowly, his eyes thoughtful. "We will take seeds from this world—plant them—and cover that young and barren world with beauty such as our own world of Disep once possessed. Our readings have shown that the third planet is suitable for us in every-

thing except gravitation. That is somewhat in excess of normal, but no matter. You will give orders for space machines to be prepared for departure at sundown tomorrow. Within an hour you will receive tabulated lists of those whom I shall choose to accompany me. Now you both may go."

The two assistants departed, leaving Razak gazing musingly into the reflector.

"To that world shall come life," he murmured. "Life from a world within a world. The power of long-dead Disep shall be felt throughout the length and breadth of this supra-universe."

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There was, however, one thing which the implacable Razak had overlooked in his preoccupation before the departure of the space machines for the third world. During the hours whilst he arranged for the ten ships to be fully provided, especially with high-power disintegrators for the levelling of mountainous terrain, the intellectual mastery he held over "Destiny" was removed: his whole concentration and that of his fellows was trained on the difficulties and trials of the last hours.

In consequence Anyas, along with his fellows, arose from semi-stupor as he worked in Antipode City — and for the first time he realised clearly the tremendous dominance Razak and his fellows had been holding over them.

Reference to television soon placed them in possession of the facts as to what Razak was planning to do. Immediately Anyas went into consultation with his comrades and from the conference there emerged a plan, a possible

scheme whereby to overcome the deputising Vildon once Razak had departed into space.

Anyas, definitely the leader now as far as the Nalofixians were concerned, acted immediately. In the five short hours he had left to him whilst the Disepians were in the projectile laboratories, he got an army of robots to work, which had formerly been engaged only on the tasks the white-skins had planned. Now, following the biologist's directions, they drove fast machines to the four corners of the planet, disintegrator beams in the base of their fliers gouging vast chasms in the landscape as they went, soundlessly cleaving mountains and plateaux alike, forming about the uninhabited parts of the planet a veritable network of thousand-foot-deep valleys, all of which led back to within two miles of the shores of the principal oceans grouped at the opposite poles.

In all, the robots took three hours to accomplish their noiseless purpose, scoring the planet disk with regular parallel lines in all directions from the sea defences, ending the channels at five miles distance from the mighty city wherein the interlopers from Disep were now watching Razak's departure for the third world.

The sun had been set some little time—darkness enveloped the planet. This very fact of darkness, as Anyas had hoped, served to prevent Razak from observing the changed appearance of the planet's disk.

Anyas, from his Antipode City laboratory, surrounded by as many of his fellows as the place would contain, was smiling in grim triumph. Here the sun was shining, but television was bringing back all the necessary information concerning Razak's departure. Which was all Anyas needed. His massive talon closed over a series of buttons and switches.

"Interlopers!" he breathed vengefully. "Razak has gone into space. That leaves only Vildon and his immediate contemporaries. So they seek to master our planet, do they? Here in my grasp lie a series of remote-control explosive switches. Whilst one corps of robots carved

chasms from the oceans to the chief city, another section laid depth-charges of space-gun explosive at the shore end of each channel. I am told the work is finished and the wiring connected.

"Once I depress these buttons every channel at the sea end will explode, permitting the twin oceans of the opposite poles to deluge inward to the centre. They will utterly overwhelm and destroy the Disepians before they can do a thing to help themselves! Some of our own people will go too—that is unavoidable. The point is that we shall be left with Antipode City, fully equipped, ready to start again. If Razak ever dares to return with his fleet we shall destroy them all before they ever reach the surface of this planet. Later we will destroy him on his third world and be rid of him forever. Is that understood, my friends?"

The assembled scientists nodded, their faceted eyes gleaming brightly with triumph. Anyas gave a grim smile, depressed the multiple switches, and then stood back. Almost instantly the entire bulk of the planet quaked and trembled to the force of titanic concussions. The explosive tore out the remaining barriers between channels and oceans. Colossal volumes of water belched inward along the given tracks, an inevitable smashing deluge which reached the master-city rapidly and crashed in upon it from all four sides.

Vildon, about to take over the control Razak had assigned to him, received warning too late. Before he or his fellows could make a move the flood was upon them. It drowned them in the tumbled ruins of the city, driving their corpses deep into the swirling whirlpools of brine, stone and metal.

In an hour the entire landscape had changed. Gradually, the spent oceans started to reform themselves, thundering in raging torrents through the specially made channels that left only the poles high and dry.

"We win!" Anyas cried, staring into the televisor which gave him a view of ocean where the master-city had been, a view reflected back from a directionally-controlled observation flyer. "The Disepians are destroyed! Our task now is to rebuild and chart the land. Once the oceans have established a new level and position we can begin."

CHAPTER EIGHT

In his triumph, however, Anyas had reckoned without Razak himself. The merciless ruler of Disep, once sunlight came to the side of "Destiny" facing the space fleet, saw immediately what had happened. He also realised why his efforts to get in touch with Vildon over space radio had failed.

"Razak, what's happened?" demanded Cralo, his immediate attendant.

"I should have thought that was quite obvious." Razak's voice was cold with fury. "Those scientists on the other side of the planet must have played a swift move which utterly overwhelmed Vildon. Anyas must be responsible for this. He has destroyed the master-city by diverting the polar oceans. And that means our control over that planet is at an end."

"But, Razak, we had such plans! We must return at once and assert our power," Cralo decided, his hands already on the switches—but Razak stopped him.

"No, Cralo." Razak shook his head. "You may take it for granted that, if we tried to return, Anyas would be on the watch for us. He would destroy us completely because in Antipode City he has all the necessary scientific equipment for doing so. I realise now that I was a fool to send him there, and an even bigger fool to forget to hold him under my will during the last hours. Anyas remains to build a new world—or so he imagines."

Razak stopped talking, his iron features masked in thought.

"You have some plan?" Cralo asked presently, his voice eager.

"I was just thinking, Cralo. It occurs to me that we placed in these space machines of ours special disintegrators, similar to those in Anyas's possession. Our purpose in installing them was so that we could level mountains on the third world——"

"But you mean we can use them for other purposes as well?"

"I mean that at our present slight distance from our starting point we can use them very effectively! Anyas shall not succeed in taking control after destroying half of our people. I shall destroy him in return." Razak made up his mind abruptly. "Give orders to the remainder of the fleet to train their disintegrators on the planet and then stand by for my firing order. We shall see whether Anyas and his followers are as clever as they think. Hurry!"

Cralo obeyed immediately. Razak's mouth was an unyielding line as he received the information that every weapon was ready. The idea of allowing the victorious Anyas to remodel the world they had recaptured never occurred to him—only the idea of extinction dominated his ruthless brain.

"Fire!" he commanded into the transmitter, and the order was immediately relayed to the remaining nine vessels.

Simultaneously the entire battery of ten disintegrators released their powers, trained exactly on the planet some 100,000 miles distant. Calculated to be dead correct by mathematical machines, the terrific force struck the planet's surface and instantly blasted Antipode City (just coming into view with the planet's rotation) into dust, scooping out vast craters in the ground beneath it.

"A lifeless world," Razak commented. "A pity in some ways, I suppose, and yet very necessary in others.

A dead and now waterless planet, carrying the eternal mark of Anyas's short-lived triumph in the shape of those still visible chasms stretched across the disk like a network." He turned abruptly. "Set the course back on a direct line with the third world—recoil has turned us aside. Proceed afterwards as already instructed."

Within two hundred hours the Disepian fleet had landed on the third world. "We will name this planet Terra," said Razak.

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During the ten years occupied in building a city Razak's colleagues discovered many things—notably the formation of the planet on which they lived. So far as they could judge, the city was erected upon an enormous plateau of land existing between two great continents, ice-bound to the north with the obvious approach of a Glacial Age. Nor was the plateau in a very secure position. The ocean, still in the throes of tempestuous upheavals, revealed distinct signs that it might ultimately sweep inward between the two continents and engulf the city in its depths.

To this possibility, when it was brought to his notice by Cralo, Razak paid surprisingly little attention.

"There are other things to occasion anxiety," he said, "but since the people have not yet had the wit to observe these signs I shall not explain—until I am forced. One of our problems, though by no means the greatest, is the exuberance of growth which faces us on every hand—the enormously fast germination of plant and trees. Take a look at this."

Cralo followed the ruler to a giant map on the wall and studied it. It was nearly all marked out in red circles, to which Razak pointed dramatically.

"Jungle!" he declared. "Everywhere you see those red circles the interior thereof is impenetrable jungle. Trees towering to tremendous heights, crushing vines,

and beneath all this vegetation is a protoplasmic slime. It is only what one can expect on a young planet, of course, but it spells danger. Also, see this—" Razak crossed to another section of his laboratory headquarters and held up a sealed vial. Within it, in cloudy fluid, microscopic objects were wriggling and swimming with the zest of life.

"Amoeba, fast developing," Razak said grimly. "They have already got beyond the stage where they divide by fission. In this vial we behold the beginning of the beast age. Through the ages these mites will mutate into animals, possibly giant ones."

"Even that need not worry us, Razak," Cralo replied. "We have apparatus quite capable of destroying such monsters. In fact there is no form of life we cannot destroy. I just cannot understand why such a trifle should preoccupy you. There must be something else."

"Yes—there is." Razak's voice was quiet as he put down the vial. "It is something so terrifying I refuse to believe it. Indeed I have not yet considered the matter scientifically—but I must. Later, though! One does not like to come to grips with an unpleasant problem until it is inevitable."

Cralo hesitated, then realising his ruler was not even any longer conscious of his presence he left silently.

"Some things," Razak muttered, clenching his fist, "are impossible to understand. To achieve everything and then lose it. It does not make sense! It is the one missing factor in the make-up of the universe—the unpredictable."

Still absorbed in his thoughts he went over to a machine—a mechanical monster. He just could not remember how to control it—and certainly nobody else knew how because he had invented it.

He did not dare at this point to consider the deeper possibilities of his amnesia. But Razak was not alone in his troubles. Other scientists, both men and women, in various parts of the planet, also found that they faced

—with increasing frequency—problems they could not solve. Where formerly they had overcome nearly every difficulty by cold, precise reasoning, they now found their minds clouded and no solution seemed to penetrate the veil. In direct consequence of this more than one worker found his ability to control the disintegrators—which were slaying the jungle around the city as fast as it encroached—suddenly faltering. A temporary period of mental blackout in which it was impossible to remember which switch did what. And in that time the swelling greenery had the opportunity to overwhelm the hapless operator even as he strove to bring his mind to action.

At first the occurrences were isolated and because of that unreported. Those who knew of them assumed that the operator concerned had been working too long without a break and had lost his grip for that reason; but when it came to the children of the most newly mated couples being backward in development it was time to do something—and the matter was promptly put before Razak.

In impassive silence he listened to the deputation which visited him, and as usual it was Cralo who was at its head as spokesman. "We urge you, Razak, to make an examination of ten of the latest children to be born," he said. "Something is wrong with their intelligence quota. They don't even understand the cube and the pyramid, as all normal children of three months of age have done in our race from the very earliest times."

"Are their other physical reactions normal?" Razak asked, musing.

"Apparently. In fact, physically, they seem almost better than normal. It is a most baffling paradox. This planet is obviously having a strange effect upon them—"

Cralo broke off and looked up in surprise as the alarm signal, only used in exceptional emergency, abruptly came to life on the ruler's desk. Razak looked at it, no

change of expression revealing his emotions, then he switched on the communicator.

"Alarm signal received," he announced. "What is the trouble?"

"Murder, Excellence," came a breathless voice. "I am speaking from Sector Ten. Kilva, one of our most trusted men, has suddenly reverted to his ancestors and killed a fellow scientist—without reason."

Razak's lips tightened. "And what have you done about it? Do you regard that as sufficient reason to set the extreme alarm in motion?"

"Yes, Excellence. Though only Kilva has so far committed murder there are others who have taken sides with him and refuse to allow him to be captured. Sector Ten is in a state of chaos. What are my orders? I started the alarm so everybody could be warned to stay clear."

"I will attend to it," Razak replied briefly. "If you can return to your headquarters, do so."

"Yes, Excellence. But what of Kilva? Am I to leave him to his sympathisers? He has obviously a recessive unit somewhere in his make-up, and it has suddenly mutated to turn him into an unreasoning killer."

"You have your orders," Razak said. "Obey them."

He switched off, waited a moment and reflected, then switched through to the defence headquarters. Here an armada of all manner of engines of war was stored, ready for instant use in case of attack from some unknown source.

"Razak is speaking," the ruler said into the microphone. "There is trouble in Sector Ten where an intellectual has suddenly atavised. Proceed there in aircraft and blast Sector Ten from the face of the planet. Do not discriminate between men or women, or between scientists and workers. Wipe out the lot!"

"Yes, Excellence."

Razak switched off again and settled back in his chair. "You were saying, Cralo?"

"I—er——" Cralo recovered himself with an effort. "Excellence, do you know how many souls there are in Sector Ten?"

"Naturally." Razak's eyes were cold. "Three hundred and sixteen. Why?"

"You cannot mean that you wish all of them to be killed? Blasted out from the face of the planet, to use your own words. It's massacre."

"Whilst I am ruler, Cralo, I shall act as I see fit. In a case where opposing factions form I do not take sides. I destroy both and so prevent any trouble later. Kindly continue with the subject on hand."

Cralo rose to his feet. "I have said all I need to say, Excellence. Perhaps you will examine the babies in question and see if anything can be learned? If they are examples of our future generation I'm afraid it bodes ill for the science of Disep."

"Have them sent to my laboratory," Razak instructed. "The biological section. I will see what I can find out."

At about this time the airfleet which Razak had ordered to attack was raining destruction down upon Sector Ten. No warning was given, and in the space of ten minutes the great area, measuring nearly five square miles and closely packed with domiciles and power rooms, was a mass of white-hot ash, smoke drifting on the heavy breeze. Not a single soul remained alive and, as the news spread through the city, the scientists looked at one another and wondered. Razak's cruelty seemed senseless, too, for he had destroyed many valuable machines which it would take years to replace.

Razak received the news of Sector Ten's destruction without emotion and then went to the biological laboratory to study the babies which had been bought there. He worked in private, each baby in an air-conditioned case, reacting to the instruments which he trained upon it. The more he studied the gauges and computed, the grimmer his relentless face became.

"The thing I feared," he muttered to himself—and

upon this he gave up experimenting with the babies and instead subjected himself to a rigid test, both mental and physical. Robots, supplied with special reels of sound-recorded tape, fired questions at him. He answered as many as he could, and where he failed an instrument with a pointer jumped guiltily along a graded scale.

Finally, when the self-inflicted inquisition was over Razak rose with uncommon tiredness from his chair and mopped his face. He looked at the scale, his brow darkening.

"Twenty per cent below quota—an increase of three per cent on the last trial."

Any member of his race looking at him then would have seen for a moment a bleak and deadly fear in his eyes. Not the fear of the unknown for there was not anything, with his vast scientific knowledge, of which he was afraid—but the fear of losing all that he had gained. He could see ahead of him the grim figure of Nemesis, striding through the chaos of this terrible, very young planet.

It was typical of him that now he knew he was face to face with a first-magnitude disaster, he threw every ounce of his intelligence into solving the difficulty. He bungled mathematical problems that formerly would have offered no trouble, and he even forgot how to set the calculating machines in order to derive the right answer.

He was a genius sliding down from high eminence, surrounded by a wondering and increasingly hostile people. What of the babies upon which he had not reported? What of the massacre of the people of Sector Ten? What of the encroaching jungle and the distant rumble of the ocean, eroding its way ever nearer to the city? These were the questions hurled at him, and to which he had finally to give an answer.

So he convened a meeting in the main power-room of the city.

"My people," he said, "you have asked me to look into a problem. The problem of babies who are below average in intelligence and the very similar problem of Kilva, who went berserk in Sector Ten. The babies and Kilva, though you may not believe it, are closely linked. Kilva reverted to being on a par with his ancestors many thousands of cycles back along the evolutive scale. As for the babies, the fault lies with the parents, and the devitalised genes which gave the babies birth.

"We are faced," Razak continued, "with the tragedy of fading intellect! It began in mere slips of the memory and has now increased to a state wherein some of the simplest problems lack solution. Not only I alone am affected, but every living soul in the race. I can see this degeneration in your faces—you can see it in mine. We hardly understand our science any more. I have managed to solve the reason for our unhappy state, but I cannot find a cure for it."

"The reason, Razak!" somebody cried. "What is the reason?"

"Gravitation." Razak allowed the word to sink in and then continued: "You all know how, ever since we came here, we have laboured against gravity, that one terrific power we cannot overcome. Pathologically, as most of you know—if you can remember — the bloodstream is entirely responsible for the condition of the brain. A poor bloodstream begets a poor brain, and a good one produces brilliance. On our own world of Disep in the microcosm the gravitation was normal for our bodies, even as it was on "Destiny." The atmosphere of both those worlds was also correct.

"But here the atmosphere is charged with unexpected toxins, in many cases created by the rampant growths which we ourselves started! The gravitation pulls perpetually on our bloodstreams and prevents an easy flow to the brain. Hence we are never mentally stimulated and also our bloodstreams are clogged with poisons. We can never be rid of them because the air around us is

charged with it. We are struggling in the midst of incongruous conditions and must pay the price. A living being is inevitably moulded by environment. Atavism, mental and physical, has set in—and it will continue. It means the doom of our science—that much we have to realise."

"Retribution!" Cralo cried. "That is what it is! Retribution for the destruction of the rightful inhabitants of 'Destiny'!"

"In your anxiety to throw the blame on me, Cralo, you have conveniently overlooked the fact that you were quite anxious to destroy the destroyer. Nor were they the rightful inhabitants—their minds told me that they came originally from some world in far Andromeda. In your case, Cralo, the toxic atmosphere here has made you sentimental instead of coldly incisive as you used to be. As for me—it has hardened my nature to an even greater extent than before. All of us are different—and all of us are doomed!"

"Can we not leave this planet and find another?" somebody shouted. "Do we have to accept this fate so calmly?"

"We could try and find another planet," Razak agreed, "but as I said before I doubt if it would be of any advantage. It would mean constant travelling through space, deprivation of essential atmosphere, living in a tiny imprisoning world for unnumbered years. Besides, our numbers are greater now. There are children—and there will later be the children's children, the nucleus of a race to come. And each one will be less intelligent than the predecessor until they reach the final low point and become almost akin to the brutal, apelike beings which were the ancestors of our own race. Do we want that to happen as we cruise through the void, searching? Always searching? No! We would kill each other. Better the children and their children stay here; then evolution will take its course and they will gradually ascend the ladder once more, moulded by the

new environment, able to be happy in this world by the process of adaptation. In the last resort they will become intelligent thinkers—but throughout their life on this world they will never equal our own past brilliance. This world can never give that."

"Then," Cralo asked, in the stunned silence, "this means that our race is ended?"

"Ended in one phase, yes—but just commencing in another. It is obvious that this city cannot stand much longer against the savage storms which batter and rage across the world. Ultimately it will be sent to the very bottom of the ocean which is striving to sunder these two continents. We shall have to scatter to all parts of this planet, live as best we can on the rank fruits these trees of ours bear. The art of consuming nourishment from the air is, unhappily, a lost one—and in any case the toxic elements are too prevalent to permit it.

"Yes, we must forget all this!" Razak stood more erect, resembling again the relentless leader he had always been. "Some of us may last long enough with our devices to build cities in other lands wherein to keep science alive for a while. But finally destiny will catch up. Our children's children will be cave men and women, seeking escape from the deadly cold which is to come, and our city will be at the bottom of the sea." *

Razak stopped, realising for perhaps the first time, the stunning inevitability of the disaster which had overtaken them. The people waited, then seeing he had no more to tell them they broke up and returned to their various domiciles amidst the roar from the not-so-distant ocean.

Within an hour exodus began. The once proud race whose intellect had brought them from the microcosm to the centre of a super-universe set off like pioneers into the unknown, taking their children with them and a few precious belongings.

Razak, because he was the most intelligent of all even

yet, took with him as much preserved food as he could carry—then, scorning air machines or other devices for rapid travel, he set off on foot alone.

* * *

It was growing dark now. He walked onwards into it, feet stumbling on the rocks, spume from the ocean flying overhead and wetting his face. And suddenly he stopped, peering into the gloom. Somebody was there. So he waited as the figure came nearer. It was just light enough even yet for him to discern a woman, one of his own race.

"Razak!" she whispered, peering at him. "Excellence!"

"No longer," he answered quietly. "I am as you—a lone traveller, walking—I know not where. And you?"

"I am trying to find my detachment, Excellence. I seem to have lost them somewhere. I was in company with forty or fifty men and women and—I paused for a moment and when I searched again they had gone."

There was something decidedly unconvincing about the woman's explanation, but Razak was in no mood to question—nor had he the wit any more to try and read thoughts or pin this female down by the sheer force of his personality.

"We can walk together," he said, taking her arm. "Come. Company helps."

The woman did not resist him as she walked beside him in the buffeting wind.

"You are travelling alone, Excellence? Not with any members of your retinue?"

"Alone, yes. That is how one should face the future."

The woman did not answer. Razak peered at her in the gloom, his mind revolving again around thoughts of a mate, and this time he did not recognise his emotion as primitive. She seemed fairly young, had dark hair flow-

ing to her shoulders except when the wind snatched it away. Her clothes were of the conventional Disepian pattern.

"You should not call me Excellence," he said presently. "Those days are gone—forever. All of us have walked away from eminence into the unknown, and what we become depends entirely on what we do now."

Still the woman did not comment, but she kept on walking at his side; then presently as he heard the ever-increasing thunder of the ocean ahead of him he paused and caught at the woman's arm.

"We are not getting anywhere, woman! That is the ocean in front of us."

"I know," she answered simply.

"You know? Then why did you allow me to continue walking this way? It is a waste of time!"

"I cannot regard it as that. It has a purpose—and nothing with a purpose can be a waste of time."

Razak frowned. The woman's strange way of talking was commencing to irritate him. He tightened his hold on her arm and forced her to look at him. In the grey dark her face was white and featureless.

"Who are you?" he demanded. "Why are you so—so detached from everybody else? I am the only one who should walk alone, as the one-time ruler."

"You shall walk alone, Razak. Have no fear of that. The cruellest ruler that ever ruled Disep deserves only that—I am proud to be the one who can share the last moments with you."

"Last moments?" Razak repeated, baffled, "what are you raving about?"

"My name is Sanfina," she answered. "My husband was Kilva, the scientist who went berserk when devolution started amongst us. You did not give him the chance to reassert his personality. You destroyed him — and everybody in Sector Ten save nine people. I was one of the nine who survived."

"Well?" Razak asked acidly. "What now?"

"I followed you when you left the city and when at last I was sure you were definitely alone I hurried ahead and appeared a little while ago to meet you."

"Just to tell me you are the widow of Kilva? A colossal waste of effort."

"No, to tell you that you are doomed. You said we would walk out into this ghastly planet and make new lives for ourselves. I was determined you would be one who would not perpetuate. You and all you stand for are better dead! You destroyed the one being in all the universe I loved, and for that you, too, shall be destroyed!"

"Insanity!" Razak said briefly. "Devolution carried to its limits. You are no longer the mistress of yourself."

He turned away in fury, then it occurred to him that perhaps the woman had brought some kind of weapon with her which she would fire the moment his back was turned—but evidently not. He could descry her dim figure standing motionless, hands at her sides, so he continued to walk away from her.

Then he paused, spume from the ocean wet on his face. He frowned to himself and changed direction. Clambering to a rocky ridge he again found the sea hurtling its brine at him. Where the plateau had been, and the great master city, he could only detect a dim, heaving grey capped with white peaks. For a moment he was startled. Turning swiftly he hurried back down the slope and found Sanfina still standing where he had left her.

"The sea seems to be all around this position," he said. "We had better move quickly."

"To where?" The woman laughed softly. "We can't move anywhere, Excellence. That is why I deliberately walked in this direction in the hope you would unthinkingly keep beside me. You crossed a point where the plateau dips and the tide is on the flood. I made sure of that. We can't leave here. Now you know what I meant when I said I'd share my last moments with you! They will be sweet moments, thinking of Kilva."

Razak hesitated, the maddening rage of the atavised brute he was fast becoming suddenly overwhelming him. He lashed up his fist and drove it with smashing force into the woman's face. She jolted away from him and collapsed on the rockery to remain still.

"Fool," Razak whispered. "Fool that you are! She was a woman, even if an enemy. A mate——"

He hurried over to her, lifting her limp body in his arms; then he lowered her again. She was unbelievably still in his grasp. In a few seconds he knew why. The blow he had lashed at her had broken her neck.

Slowly he stood up, fighting to recover the last fleeing remnants of the man he had been. He, the man who had mastered time, space, and the microcosm was trapped on one small track of land with the sea roaring in his ears. It was so absurd, so stupefyingly absurd he could not credit it. Then when he did he started to laugh.

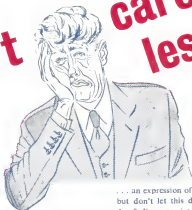
For the first time in all his life he laughed. It was a new sensation, exhilarating — maddening too. Still shaking with his own ironic mirth he blundered back up the slope and looked at the roaring sea. It was vastly nearer, thundering inwards, drawn by the drag of a very near moon.

Before he realised it it was about his feet, sweeping him off balance. The triumphant wave poured irresistibly over the edge of the higher rocks and cascaded down into the depression below, bowling the woman to the bottom of the slope.

Within a few moments the depression had gone, and there was only the raging sea and the screaming dark. . . .

THE END

"I couldn't care less!"



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